

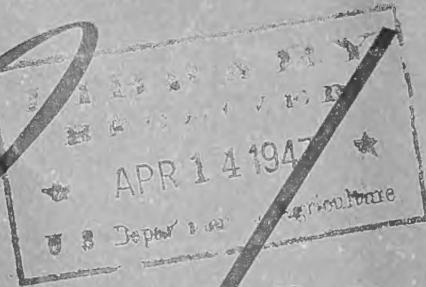
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

PETUNIA
THEODOSIA

1947

Garden
Guide



PETUNIA
ELK'S PRIDE

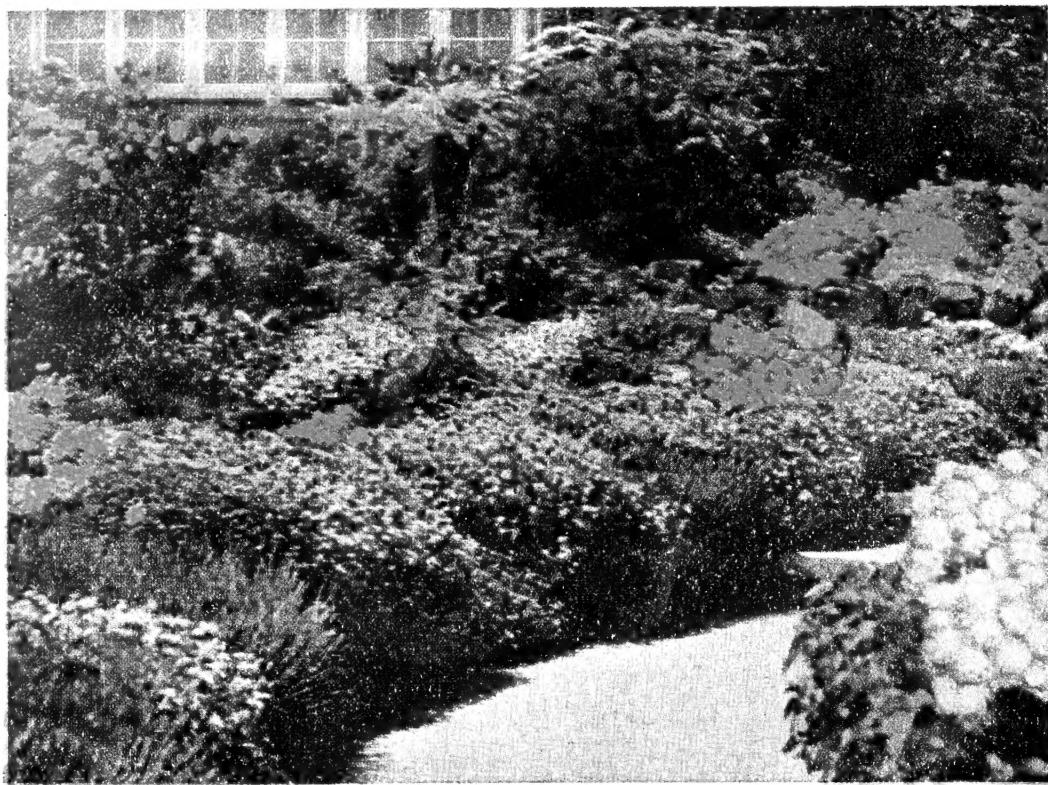
PETUNIA, Ruffled Giants of California

ZENNER BROS. SEED CO., Inc.

3718-20 N. E. Sandy Boulevard

PORTLAND 13, OREGON

Murdock 1101



ROCK GARDEN ANNUALS

MIXED

This mixture of over 30 varieties, not exceeding 12 inches in height, will provide blooms throughout the entire season. Planted as early as possible, the gardener should have blooms by the end of May. A succession of blooms will follow until late fall when frost will destroy the flowers. A second lot of blooms may be enjoyed on most plants if they are cut back to two inches of the crown and properly watered. **Pkt. 25c.**

SALPIGLOSSIS (Painted Tongue)

For delicate grace, richness of coloring, and velvety texture, the regal salpiglossis has practically no equal. From a low base of leaves rise slender wiry stalks which bear one or more large Lily-like flowers in a magnificent range of colors. Height, 1 to $2\frac{1}{2}$ ft. **Superb Mixed. Pkt. 15c.**



ROCK GARDEN PERENNIALS

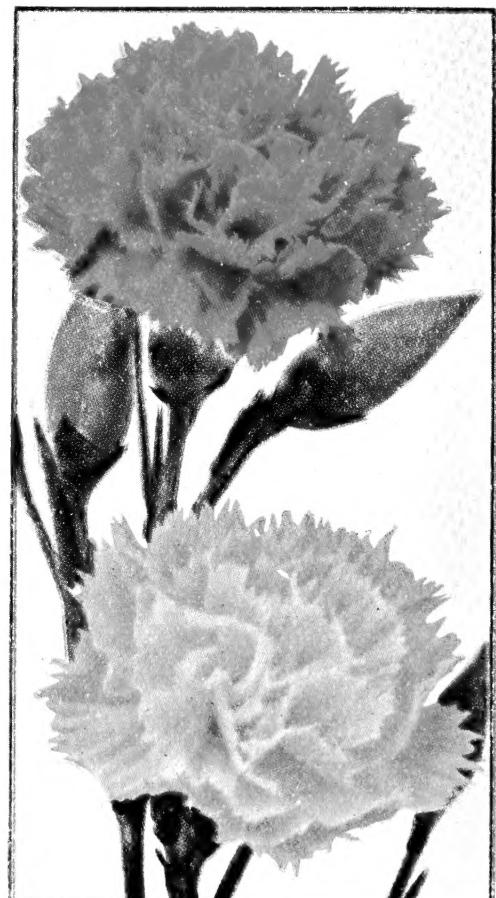
MIXED

A mixture of over 50 rare rock garden perennials with a maximum height of six inches. Some of the items will bloom almost as soon as the frost is out of the ground. Others will bloom later in the year, insuring the grower blooms all season. A planting, carefully made in a suitable place, should remain a beauty spot for a number of years without reseeding if given minimum care. **Pkt. 50c.**

DIANTHUS, Perennial

ROCK GARDEN MIXTURE

Twenty varieties of unusual species of dwarf perennials. When well grown, many plants will produce such an abundance of blooms that daily cutting of flowers will not decrease the loveliness of the plant. With an occasional replacement of a plant, a well established planting should last several years. **Pkt. 25c.**

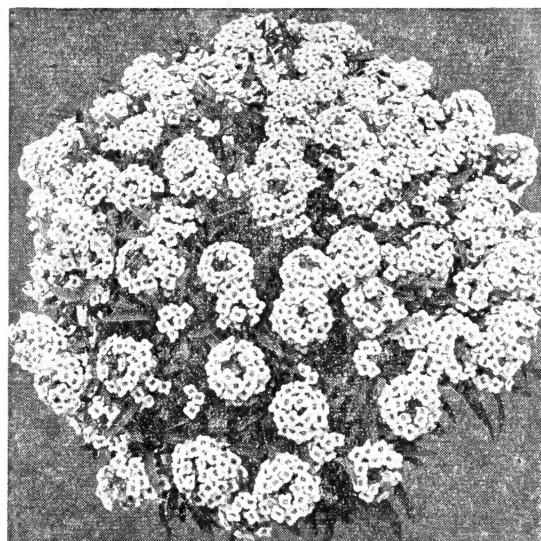


CARNATION

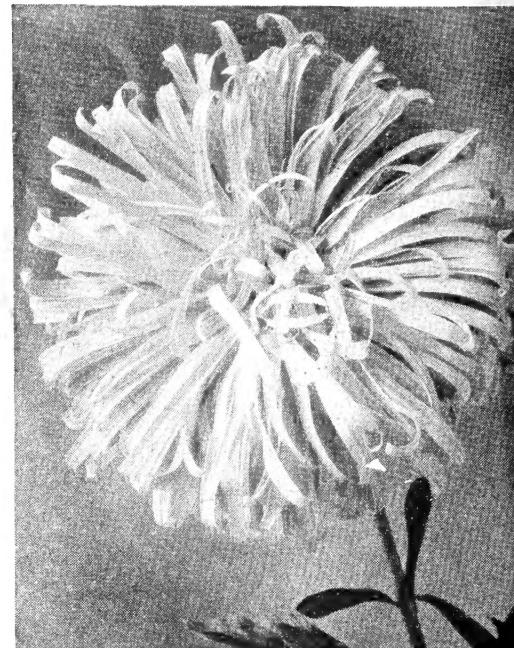
English Giants Mixed. The most complete collection of colors including many rare shades yet to be offered to gardeners. The bloom size is surpassed only by the greenhouse type. If well grown, and if the gardener will disbud from one to two blooms per stem, the size of the English Giants will closely approach those grown by florists. **Pkt. 50c.**



Arctotis Hybrids



Sweet Alyssum



Crego Aster

ANNUAL AND PERENNIAL FLOWER SEEDS

AGERATUM (a)

Popular annual plants producing fluffy blue flowers all summer. The dwarf stature and compact habit permits its use for edging or in the rockery where it will flourish in any soil. Sun or partial shade.

Midget Blue. Silver Medal, All-America Selections, 1940. A very fine dwarf Ageratum (2 to 3 inches high) with delicate foliage, practically smothered with small true Ageratum Blue Flowers. Pkt. 25c.

Blue Ball. Compact round plants, 6 inches tall, hidden by a mass of pure blue flowers. Fine for dwarf beds and edging. Pkt. 15c.

ALYSSUM, Madwort

One of the most popular garden flowers, remaining in bloom the entire season; suitable for beds and edging in summer, or for growing in pots and boxes for winter bloom.

Carpet of Snow (ra). White flowers on plants only 3 inches tall. Rapidly becoming a favorite variety. Pkt. 10c.

Saxatile Compactum. Perennial. Sometimes called Basket of Gold. It grows compactly and is covered with a wealth of golden blossoms in early spring. Height 12 inches. Pkt. 10c.

Maritimum (Sweet Alyssum). Fragrant white flowers all summer. Pkt. 10c.

Violet Queen. (a) Dwarf, compact plants of small, sweetly scented flowers of a very rich deep shade of violet. Neat in habit and free flowering. Violet Queen will unquestionably be one of the leading varieties. Pkt. 15c.

ANCHUSA, Summer Forget-Me-Not (a)

A free-flowering annual, producing its charming Forget-Me-Not-like blooms in graceful sprays from early summer until late fall.

Blue Bird. Deep blue flowers on plants 18 inches tall. Pkt. 10c.

ANTIRRHINUM, See Snapdragon ARCTOTIS HYBRIDS AUTUMN SHADES

A gay and cheerful member of the daisy family. Dozens of blossoms open at a time, commencing to bloom in early spring. Many shades of red, orange, and yellow—typical autumn tones. Foliage is a soft gray green with slender wavy edged leaves. Mixed. Pkt. 10c.

ASTER (a)

We can imagine no other flower which combines so much beauty with grace and usefulness and with which more brilliant effects can be achieved. From July until September this flower reigns supreme in the garden, not equaled by any other. For these reasons we give a great deal of attention to these flowers, and are in a position to offer our patrons remarkably fine strains, producing perfect flowers of great beauty. To do well, Asters require a well pulverized soil, always kept open by continuous cultivation. Height, 1 to 3 feet.

AMERICAN BEAUTY. Wilt-Resistant. Plants 2½ to 3 feet tall, branching, robust; flowers large, double and fine form, blooming in early September. Finest Mixed. Pkt. 15c.

IMPROVED CREGO WILT RESISTANT. The large shaggy flowers with long curled petals are not unlike the ostrich feather for which they are commonly named. The plants are strong, heavily branched and grow about 2½ feet in height.

Blue Flame. Bright navy blue. Pkt. 15c.

Crimson. Glowing deep rose-crimson. Pkt. 15c.

Cattleya. Fascinating shade of orchid. Pkt. 15c.

Purple. Showy violet purple. Pkt. 15c.

Pink. Beautiful shell pink. Pkt. 15c.

Rose. Lovely bright carmine rose, Pkt. 15c.

White. Purest white, large and fluffy. Pkt. 15c.

Crego's Finest Mixed. Pkt. 15c.

IMPROVED GIANTS OF CALIFORNIA. This Aster bids fair to become a universal favorite. Characterized by the well-known Crego type of flower, combined with the Beauty Aster's long, non-lateral, branching stems, the California Giants, double type Aster, stands at the head of the list. Finest Mixed, Pkt. 15c.

Aster, Super Giant El Monte. Deep glowing crimson, composed of abundant quantities of daintily interlaced plume-like petals. Pkt. 15c.

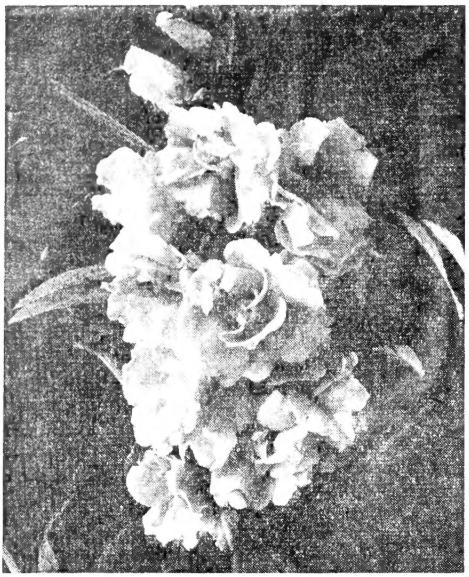
Aster, Super Giant Los Angeles. The flowers are fully double, 6 to 8 inches across, graceful and delicately interlaced. Long, stiff stems, bearing the large shell pink flowers smartly upright. Pkt. 15c.

Aster, Wilt-Resistant, Princess Anne. The blooms have a full crested center surrounded by several rows of strong guard petals of the well known Peach Blossom shade, opening delicate pink and turning rose pink as the flower matures. Pkt. 25c.

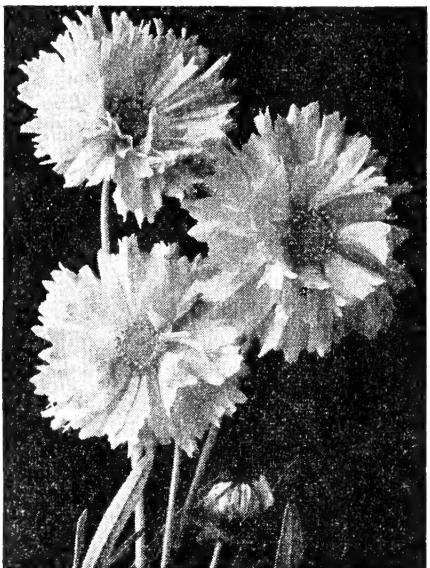
Aster, Wilt-Resistant, Princess Bonnie. A very beautiful soft salmon rose shade with the center rich gold while opening. The large blooms are freely produced on long stemmed plants which remain in good condition for two weeks or more. Pkt. 25c.

Aster, Wilt-Resistant, Princess Marsha. A strong vibrant cinnabar scarlet. This color boldly contrasts with the rich gold center of the young flowers. Three to three and one-half inches in diameter. Free blooming. Pkt. 25c.

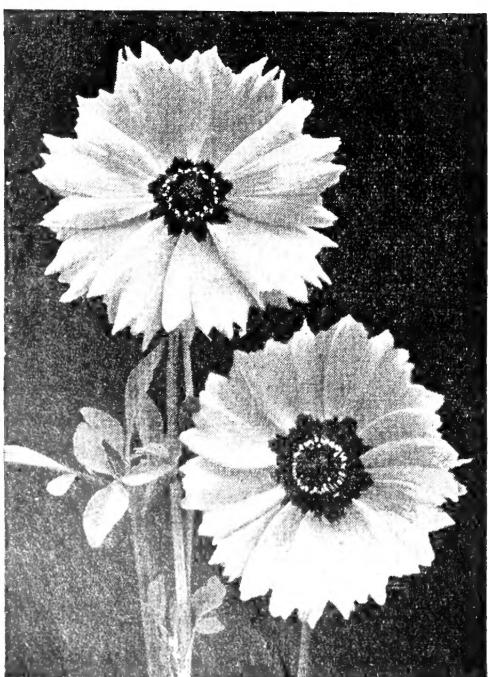
Queen of the Market. Wilt resistant. Blooming in early August, this lovely branching type of Aster grows about 20" tall with long stemmed double flowers measuring 3" across. Attractive mixture. Pkt. 15c.



Balsam, Camellia Flowered



Coreopsis, Double Sunburst



Calliopsis, Golden Crown

BABY'S BREATH, Gypsophila

Pretty, free-flowering annuals and perennials. Their misty white panicles are largely used for mixing with other cut flowers. Height, 1 to 3 feet.

Brilliant Carmine. Dainty bell-shaped blooms, excellent for decorative bouquets. Seed easily grown. Sow two weeks apart for continuous blooms. Pkt. 15c.

Elegans Grandiflora. (a) London Market Improved. An improved annual strain with single large pure white flowers. Sow at intervals for a supply of flowers throughout the summer. Height, 2 feet. Pkt. 10c.

Paniculata White. (p) Hardy perennial with sprays of tiny rose-shaped blossoms. If cut before the flowers are fully opened, sprays can be used in winter bouquets. Height, 3 ft. Pkt. 10c.

Double White. (p) Each flower double, pure white. Excellent for dry bouquets if cut and treated like the single variety. Good cut flower. Pkt. 25c.

BACHELOR'S BUTTON OR CORNFLOWER, Centaurea

Particularly well adapted for border plantings. The types cultivated for their flowers have a bulging calyx from which many finely cut petals expand. Easy culture from seed.

Cornflower, Jubilee Gem. A dwarf Cornflower making a compact plant about 12 inches in height, literally covered with flowers. Easy to grow. Admirable as a border plant and fine as a cut flower. It may be sown outside in the autumn for spring flowering, or in the spring for summer flowering. Pkt. 15c.

Cyanus Double. (a) (Bachelor's Button). This superb class of Cornflowers produces handsome, large double blooms, effective out-of-doors and in bouquets. Height, 2 to 3 feet.

Blue Boy, Pkt. 10c. Pinkie, Pkt. 10c. Snow Man (White), 10c. Mixed, Pkt. 10c.

BALSAM, LADY SLIPPER (a)

An old and popular garden flower of easy culture. Gorgeous masses of brilliant double flowers are produced in the greatest profusion. An excellent flower for your shady corner. Height, 2 feet. **Camellia Flowered.** Most improved type. Finest mixed. Pkt. 10c.

BELLIS (ENGLISH DAISY)

This attractive, richly colored perennial thrives in cool and shady locations. Seed may be sown best in the fall and also in the spring. Pkt., mixed, 25c.

BLACK-EYED SUSAN

Thunbergia (ac)

Beautiful, rapid-growing annual climber, preferring a warm, sunny situation; used extensively for hanging baskets, vases, low fences, etc. Very pretty flowers in buff, white, orange, etc., with dark eyes. Height, 4 feet.

Alata. Finest mixed. Pkt. 10c.

BEAN (a)

A rapid climber, flowering profusely; grows 10 to 15 feet high. Edible as well as ornamental. Used as a snap bean. **Scarlet Runner.** Pkt. 10c.

BLUE FERN FLOWER, Nierembergia

Purple Robe. Bronze Medal. All-America Selections, 1942. Very dwarf, cushion-like plant, surmounted with flowers of deep or violet-blue. It stays in bloom over a long period and with a colorful blanket of bloom. A grand border and edging subject; about six inches tall. Pkt. 25c.

BUTTERFLY FLOWER, Schizanthus (a)

One of our finest hardy annuals. Of easy culture in any good garden soil. Showy flowers of various colors, closely resembling some species of Orchids. Also useful as pot plants for late winter and spring; for this purpose sow in autumn.

Waller Franklin Strain. Giant flowering hybrids, an extra select large flowered compact hothouse strain containing a perfect blend of many colors. Pkt. 25c.

CALIFORNIA POPPY—

See Poppy

CALENDULA, POT MARIGOLD

(For Fall Planting)

Blooms freely in early summer and continues into the fall. Even though this plant prefers a sunny location and rather dry soil, it does well under widely different conditions, requiring little care to grow to perfection. 18 to 24 inches in height. For a second crop of flowers plant during July and August; they will furnish lovely long-lasting cut flowers for fall. Will withstand a mild frost.

Campfire Improved. A very deep strong orange with distinct scarlet sheen on upper side of each petal. Blooms flat across top and measures 4 inches in diameter. Plants are strong growing and even in habit. Exceptionally long heavy cutting stems in generous quantity on each plant. Pkt. 15c.

New Sunshine Calendula, Chrysanthemum. A clear, buttercup yellow in color with loosely arranged petals, incurved at center and reflexed at edges. Flowers mounted on strong, wiry stems a foot in length; excellent for cutting. Pkt. 15c.

Trial Ground Mixed. Chrysanthemum type, loose, large two tone. Pkt. 25c.

Orange King. Very large, deep orange-red with dark center. Pkt. 15c.

Radio. Flowers hemispherical in shape with bristling quilled petals, rich glowing orange. Graceful and attractive. Pkt. 15c. **Double Mixed,** Pkt. 10c.

CALLIOPSIS (a) Annual Coreopsis

Very showy and splendid subjects for garden decoration as well as for cutting. Sow seed where intended to bloom in early spring; thin out to 6 inches apart. Cut flowers as soon as they open, as this prolongs the blooming season until autumn. Height, $\frac{1}{2}$ to $2\frac{1}{2}$ feet.

Golden Crown. Large showy flowers in a rich orange-yellow or gold with maroon center. Of pleasing fragrance. Makes a good cut flower with 12-inch wiry stems. Pkt. 15c.

Tall Mixed. Contains a wide range of color combinations—mostly bicolors. Pkt. 10c.

CANDYTUFT (a)

Valuable for masses and edging, and considered indispensable for cutting. Seed sown in April flowers in June; successive sowing should be made at intervals. Hardy and easy to grow, blooming profusely. Height, 1 foot.

Giant White Hyacinth Flowered. Very fine for cutting. Pkt. 15c.

Umbellata. Mixed. Pkt. 10c.

CANTERBURY BELLS, *Campanula*

Calycanthema (b) (Cup and Saucers). Perhaps the most beautiful type; distinct in form, with large bell or cup-shaped flowers surrounded at the base by a large calyx of similar color, the whole resembling a cup and saucer. In separate colors—pink, light blue, dark blue, white, and purple. Pkt. 15c. Finest Mixed, Pkt. 15c. Single Mixed, Pkt. 10c.

CANTERBURY BELLS (*Campanula Medium*)

Single. These biennial plants make a beautiful pyramid of fluted bells 2 to 3 feet tall to enhance your garden. Single Mixed. Pkt. 10c.

CARDINAL CLIMBER (ac)

Graceful climber with cardinal-scarlet blooms 1 to 1½ inches in diameter. Rich, glossy, dark green foliage. Grows 15 feet tall and is in bloom all summer. *Ipomoea Cardinalis*. Pkt. 25c.

CARNATION

Few flowers surpass in beauty of form or delicious fragrance, the richly hued Carnation. The plants are branching but compact, and the handsome blossoms are produced on blue-green stems that are stiff but slender. The double flowers with their thick waxy petals are spicily scented.

Chabaud Giant. 18 inches. This variety blooms six months after seeding and continues throughout the summer. The plants, robust and erect, supply handsome, double, clove-scented flowers of extra large size. Pink, white, red and yellow. Pkt. 25c.

English Giants Mixed. The most complete collection of colors including many rare shades yet to be offered to gardeners. The bloom size is surpassed only by the greenhouse type. If well grown, and if the gardener will disbud from one to two blooms per stem, the size of the English Giants will closely approach those grown by florists. Pkt. 50c.

Mixed Colors. Pkt. 25c.

CASTOR BEAN, *Ricinus* (a)

Magnificent, tall, large leaved plants of tropical appearance, succeeding in a warm, sunny location. Beautiful for large foliage groups and background. Height, 10 to 12 feet.

Mixed Varieties. Pkt. 10c.

CLARKIA (a)

An annual flowering in July, which should be far more widely grown. It is of easy cultivation, graceful in habit of growth, and lends itself as well to bedding as for cutting. Flowers in long racemes which open in water when cut. *Elegans*. Double. Choice mixed. Height, 2 feet. Pkt. 10c.

CLEOME, PINK QUEEN

Silver Medal, All-America, 1942

A tall and attractive border plant with huge heads of delightful and refreshing pink without a trace of blue or magenta. It is never out of bloom. A grand flower, well branched, airy foliage. Reaches over four feet. Pkt. 25c.

COCKSCOMB, *Celosia* (a)

Very attractive and showy, somewhat tender annual, producing massive heads in rich shades of crimson and yellow flowers. Should be started in hotbeds and transplanted to rich soil after warm weather comes. Set plants a foot apart. *Cristata*. Choice mixed; height, 9 to 18 inches. Pkt. 10c.

Plumosa (Improved Feather Type). Choice mixed; height, 8 feet. Pkt. 10c.

COLUMBINE, *Aquilegia* (p)

These are among the most beautiful of spring and early summer flowers; very effective when grown in the herbaceous border and groups among shrubbery. Long-spurred flowers on graceful stems 2 feet or more above the fern-like foliage. Mixed Shades. Pkt. 15c.

Mrs. Scott Elliott's Strain. One of the finest tall strains ever developed, long-spurred, large flowers, in a splendid mixture of colors.

Blue. Pkt. 25c.

Long Spurred Blue Shades. Larger flowered than the other colors, these are of the most beautiful shades of blue ranging from azure blue of the Cambridge Blue Delphiniums through Belladonna to the Forget-me-not, all with a rich cream center. A perennial blooming the first year from seed in most climates. Pkt. 25c.

CORAL BELLS, *Heuchera* (p)

A low growing hardy perennial plant with heart shaped leaves, which form a low clump 6 to 8 inches high and bearing during summer, loose graceful sprays of red flowers in great profusion.

Spitfire. Large, rich scarlet. Pkt. 35c.

COREOPSIS (p)

One of our most popular perennials; the attractive flowers are borne in great profusion and are excellent for cutting. Height, 3 feet.

Grandiflora Double Sunburst. Much of the beauty of early summer gardens is due to the brilliant golden yellow of Coreopsis plantings. The double flowers are large, 1½ to 2 inches across, deep golden yellow, and are excellent for cutting as well as for garden decoration. Fine keepers; plants are easy to grow. Pkt. 15c.

COSMOS (a)

No garden is complete without Cosmos. These old favorites supply a gorgeous, colorful effect during late summer and fall. Fine for cutting as the flowers last well in water.

Early Klondyke Orange Flare. The long-stemmed flowers of bright vivid orange are freely borne on 2 to 3 foot plants. Its most remarkable feature, however, is its early blooming habit. It blooms from mid-summer until frost. Pkt. 15c.

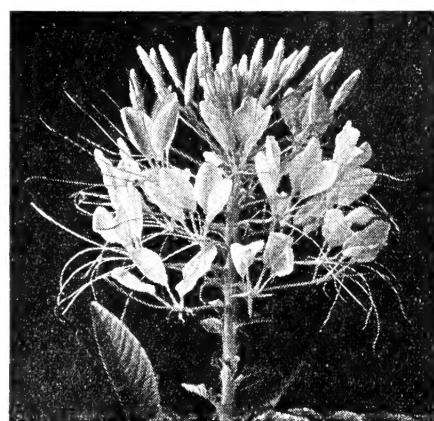
Early Double Crested. Plants, 3 to 4 feet tall, covered with a mass of lovely, large flowers. Our strain produces a large percentage of double blooms.

Mixed. Pkt. 15c.

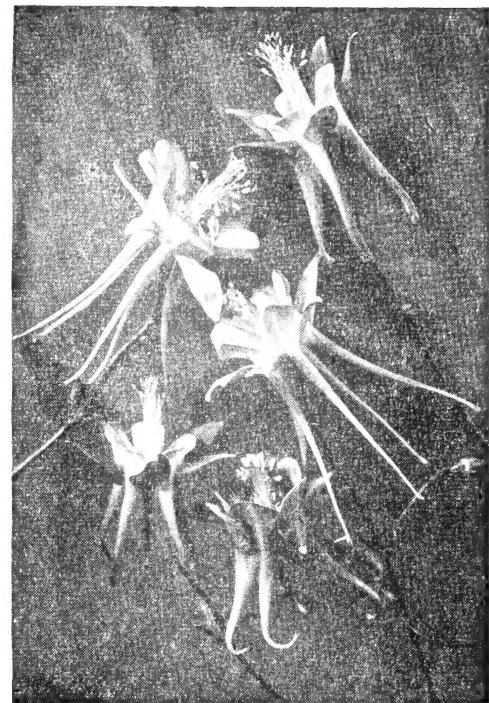
CYNOGLOSSUM (b)

(Blue Chinese Forget-Me-Not)

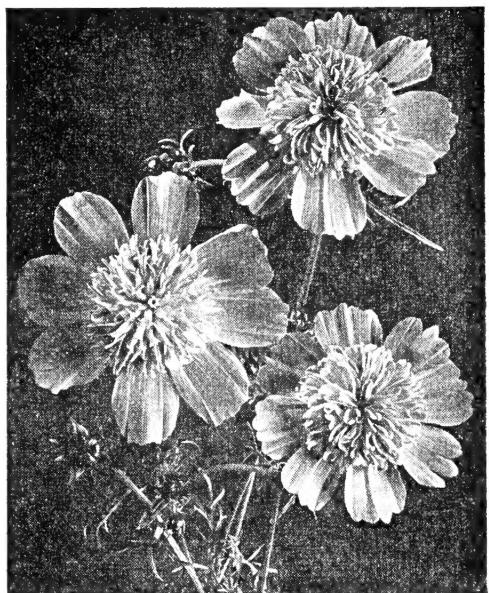
Firmament. A hardy biennial of the easiest culture, forming strong plants about 18 inches high and producing through the summer months sprays of Forget-Me-Not-like flowers. Will bloom the first season if sown early. Pkt. 15c.



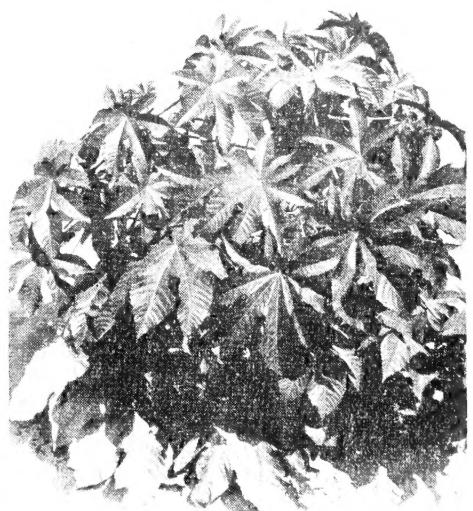
Cleome, Pink Queen



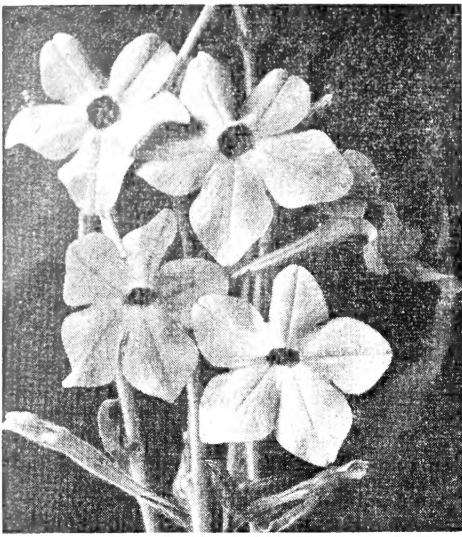
Aquilegia (Columbine)



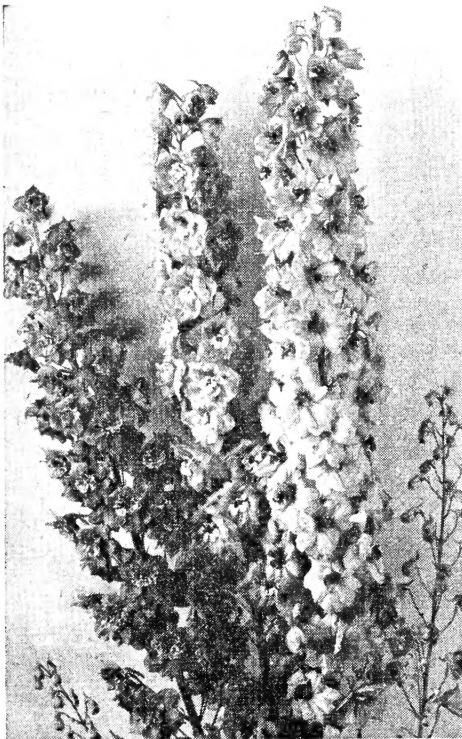
Crested Cosmos



Castor Bean, *Ricinus*



Nicotiana



Delphinium, Pacific Hybrids



Dimorphotheca

DAHLIAS (From Seed) (rp)

Improved Unwin's Dwarf Hybrids. These double and semi-double Dahlias are one of England's best contributions to the flower world. They grow from 18 inches to 2 feet tall and come in many delightful shades. Plants are compact and are as easy to grow as Zinnias. Bloom the whole summer.

Mixed Colors. Pkt. 25c.

Coltness Hybrids. Dwarf Dahlias which grow but 12 to 18 inches tall. Masses of single flowers in many brilliant colors make beautiful borders; also very useful for cutting as the flowers are borne on stiff stems. Flowers from early July to frost and require little care.

Mixed Colors. Pkt. 25c.

DAISIES

AFRICAN GOLDEN DAISIES,

Dimorphotheca (a)

The plants are of branching habit, growing about 15 inches high. An easily cultivated annual. **Mixed.** Pkt. 10c.

PAINTED DAISY, *Pyrethrum* (p)

This plant is cousin to the Chrysanthemum and Matricaria and should play an important part in many a well planted garden. Height, 1 to 3 feet.

Single Mixed. Radiating petals in many tones of rose and red about a golden center. **Pkt. 15c.**

SHASTA DAISY,

Chrysanthemum maximum (p)

Popular hardy perennial bearing large white, single blooms with handsome yellow centers. They are valuable for border decoration and especially pleasing in bouquets.

Alaska. Pure white, extra large flowers. Excellent for cutting. Height, 2 feet. **Pkt. 10c.**

Double Shasta Daisy. Flowers large, very double. **Pkt. 25c.**

SWAN RIVER DAISY, *Brachycome* (a)

Brilliant free-flowering annual blooming throughout the summer and suitable for beds or borders. The dainty flowers resemble small Cinerarias. Height, 6 to 12 inches.

Mixed Colors. Pkt. 15c.

TRANSVAAL DAISY (Gerbera)

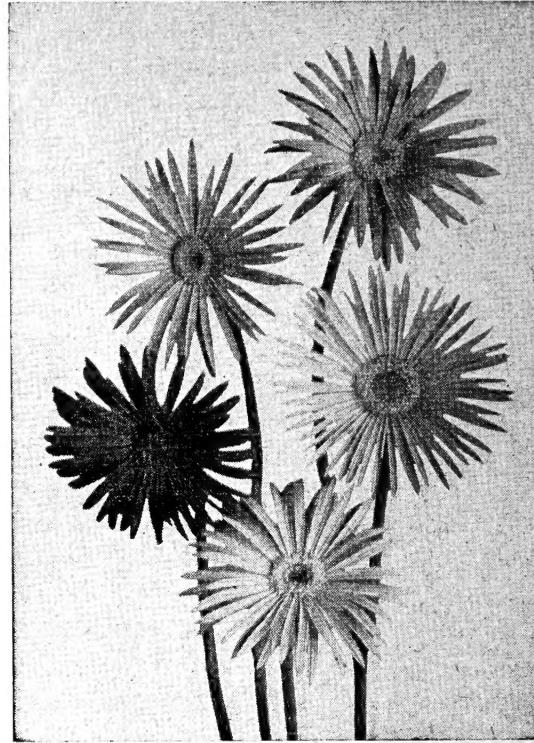
The large Marguerite-like flowers come in all shades of pink, salmon, red and yellow and are borne on long, stiff, straight stems. They require a warm, sunny position, good drainage and protection from frost. **Single.** Pkt. 35c.

DELPHINIUM (p)

One of the greatest charms of hardy Larkspurs is in their shades of blue which range from soft rosy lavender to violet and deepest indigo. The dwarfs are valuable in the border while the magnificent tall varieties are stately and beautiful in front of a shrubby background. Above the deeply cut dark green leaves rise long floral spikes. Height, 1 to 8 feet.

Pacific Hybrids. A new strain of Delphiniums originated on the Pacific Coast to grow under Pacific Coast conditions. Huge flowers, 2½ to 3½ inches across, beautifully spaced on well balanced tall spikes. Highly resistant to mildew. Color range excellent and comes practically 100% double florets. Galahad, white; Summer Skies, light blue; Blue Bird; Guinevere, pink-lavender; **Mixed.** Pkt. 50c.

Blue Mirror Chinensis. A new type of Delphinium sure to become increasingly popular. Facing upward, these bright navy-blue open flowers are without spurs. This makes it much more attractive for both a low border and cutting. The 12 to 15 inch plants have continuous blooms throughout a long season. It is a hardy perennial, blooming the first year from seed sown outdoors in the spring. **Pkt. 50c.**



Gerberas

FLOWERING TOBACCO, Nicotiana (a)

Stately plants producing large, trumpet shaped blooms until frost. Fine for beds and borders. Height, 3 feet.

Affinis Hybrids, Mixed Colors. Pkt. 10c.

Fragrant Red. Pkt. 10c.

Fragrant White. Pkt. 10c.

FOXGLOVE, *Digitalis* (b)

This ornamental hardy plant is used extensively for naturalizing in shrubbery borders and along the edges of woods. It grows well under almost any conditions, giving a wealth of bloom during June and July. Height, 4 to 6 feet. **Shirley Mixed.** Pkt. 15c.

GAILLARDIA, Blanket Flower (p)

Tones of orange, yellow, red, and maroon, often beautifully combined in a single blossom, make these flowering plants gay ornaments of the garden all summer. Height, 1 to 2 feet.

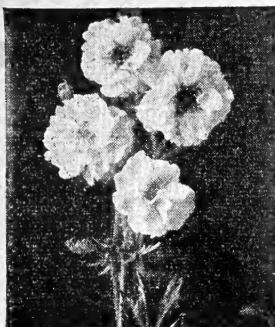
Grandiflora Portola Hybrids. (p) Semi-double blooms of magnificent size and broad overlapping petals, golden tipped around glowing centers of bronzy red. **Pkt. 15c.**

Dazzler. Large, well formed flowers, very vivid in the garden as the name implies. Golden yellow and maroon red. Striking perennial. **Pkt. 15c.**

Single Mixed. Daisy-like yellow and bronze, yellow center. **Pkt. 10c.**

PICTA LORENZIANA DOUBLE Annual Gaillardia

Upright plants 24 to 30 inches tall, blooming the first year from seed. The many flowers surmount the plant on long clean stems, making them ideal for cutting. The flowers are so fully double they appear as bright balls 2½ to 3 inches in diameter and in all imaginable combinations and shades of yellow, orange, red, and brown. **Mixed.** Pkt. 25c.



Geum, Lady Stratheden

GERANIUM SEED

A mixture of many lovely shades and types. Suitable for pot plants. Also excellent for the garden. Where frosts are encountered set plants, pot and all, in the garden for summer bloom. They do not come true from seed so one may expect some fine seedling to result from seed grown plants. Pkt. 25c.

GEUM, Avens (p)

Beautiful hardy perennials, bearing profusely large, showy, double, dark crimson flowers all through the summer. An elegant flower for bouquets. Height, 18 inches.

Lady Stratheden. A new golden yellow with large full flowers of great beauty. Pkt. 15c.

Mrs. Bradshaw. Large, double, brilliant orange-scarlet. In flower throughout the entire summer. Pkt. 15c.

HEDDEWIGII (See Pinks)

HOLLYHOCK, Althaea (p)

The beautiful color effects produced by the planting of these flowers render them indispensable for the old-fashioned garden or the herbaceous border. Height, 6 to 12 feet.

Indian Spring. (a) Semi-double annual flowers of bright rose and rosy carmine. Its many flowered branches produce a continuous show until frost. Sow fall or early spring. Flowers five months from seed. Pkt. 15c.

Triumph. Double Mixed. Tall, very vigorous plants with many large flowers well placed on long tall spikes. The very large flowers are loosely doubled, well ruffled and fringed petals making them particularly attractive. The colors range through all the beautiful shades with pinks and salmon predominating. Many are two-toned art shades. Pkt. 10c.

Chater's Double. (p) Deep rose, salmon rose, scarlet, sunflower yellow, and white. Separate colors. Pkt. 15c.

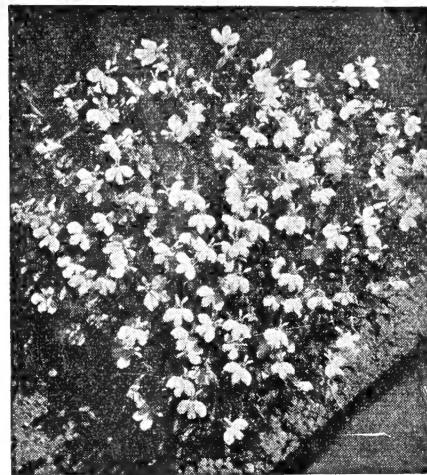
LUPIN, Sun Dials

Thrive in almost any situation. Sow where they are to bloom in May, and as plants grow, thin out to 1 foot apart. The annual varieties bloom freely from June until September, and the perennials make a fine addition to the hardy border.

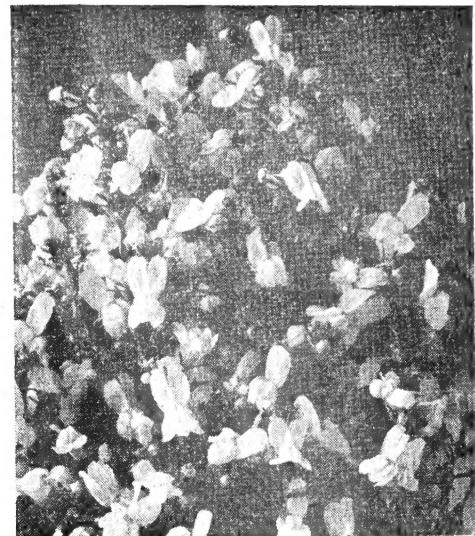
Russell Lupins. Long, closely set spikes of flowers in a great variety of rich colors—deep yellows, oranges, reds, and brilliant bi-colors never seen in Lupins before. The florets are large with flat fan-like back-standards, and unlike all other Lupins, most of the spikes retain their florets throughout the whole period of development. Pkt. 25c.

LOBELIA (a)

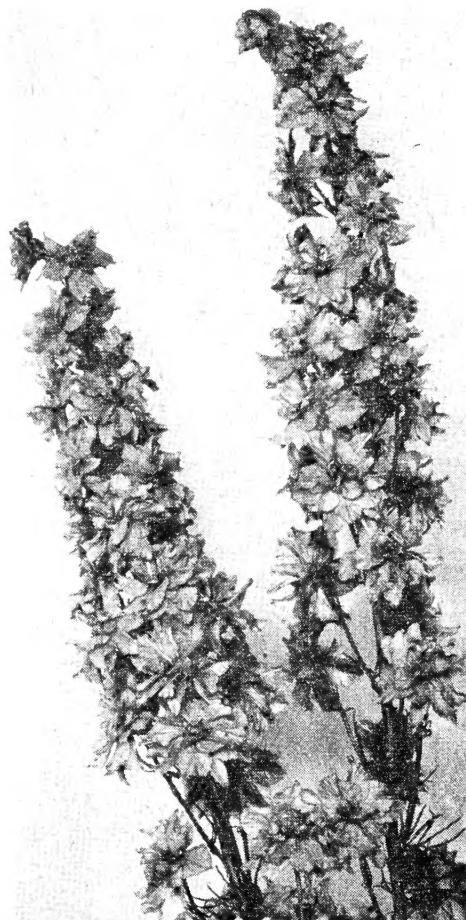
A dainty and continuous blooming annual of compact growth, remarkable for its profusion of beautiful blue flowers. Unexcelled for edging, ribbon beds, hang-



Lobelia, Crystal Palace



Linaria, Fairy Bouquet



Larkspur, Giant Imperial

ing baskets or window boxes. Height, about 6 inches.

Compacta, Cambridge Blue. A beautiful large flowered, light blue variety. Green foliage. Pkt. 15c.

Compacta, Crystal Palace. Erect and very free blooming. Best dark blue for edging. Fine for pots. Pkt. 15c.

Sapphire. A superb variety of pendulous habit; large deep blue flowers with conspicuous white eye. For hanging baskets and window boxes. Pkt. 15c.

GODETIA, Satinflower (a)

Very handsome annual plants, especially suited for semi-shady locations. Sow in spring in the open and thin to 8 or 10 inches apart. The flowers are bright and colorful and the single sorts are not unlike the Azalea in form.

Tall Double. Long graceful spikes are decorated with double blossoms resembling satin pompons one above another. Height, 2 feet. Pkt. 15c.

LINARIA, Miniature Snapdragon (a)

This interesting annual bears flowers which resemble miniature Snapdragons ending in single elongated spurs. It includes both trailing and erect growing varieties which are little known but worthy of greater attention. Height, 8 to 18 inches.

Fairy Bouquet. Small spikes of dainty, pastel flowers. Fragrant. Free-flowering and lovely in the mixed border, Pkt. 15c.

ORNAMENTAL GOURDS (ac)

Ornamental Gourds are easily grown in rich soil, where they will produce plenty of fruits. They may be trained on trellises and the ripened fruits used for ornaments. Special mixture of large and small kinds. Pkt. 10c.

LARKSPUR (a)

Annual Delphinium are adorned with finely cut, feathery foliage which set off to advantage the handsome long floral spikes of double blossoms. The colors range from pure white through soft shades of lavender and pink to deep blue.

GIANT IMPERIAL. Tall, upright, compact, basal branching in habit, the Giant Imperials have replaced all other types of Larkspurs for general garden use. Their Delphinium-like spikes of double florets are carried on stout stems 4 to 5 feet.

Blue Bell. Delightful clear light blue. Upright with long base branching spikes. Pkt. 15c.

Blue Spire. Very deep violet blue. Outstanding color. Pkt. 15c.

Carmine King. Rich deep carmine and salmon flowers on long spikes; 3 to 4 ft. stems. Pkt. 15c.

Pink King. A lovely soft, yet vibrant shade of salmon rose. Fully double, two-inch florets of rounded broad petals which are evenly and closely spaced on stems. Basal branched character gives several fine spikes of bloom on each plant. One of the earliest flowering of all Larkspurs. Pkt. 15c.

Pink Perfection. Two-inch florets of rounded broad petals evenly and closely spaced on stem, giving a heavy Hollyhock-like cutting spike 24 in. long. Very free flowering. Color is luscious, lively light pink. Pkt. 15c.

White King. Flowers pure, glistening white, with extremely large double florets, evenly spaced on stem. Early, the finest Larkspur. Pkt. 15c.

Finest Mixed. Pkt. 10c.

**We Use and
Recommend
for Seeding,
Transplanting,
Growing**

PLANT-CHEM SALT

*A scant
spoonful makes a
Gallon of Rich Plant Food*

4 safe, odorless, easy to handle, concentrated plant foods with all nutrients, trace elements and growth hormone

PLANT-CHEM	LAWN-CHEM
25c size makes 16 gal.	50c size makes 100 gal.
\$ 1.00 size makes 100 gal.	\$ 1.50 size makes 400 gal.
2.00 size makes 400 gal.	4.00 size makes 1200 gal.
15.00 size makes 5000 gal.	12.00 size makes 5000 gal.

PLANT-CHEM ACID FOOD	PLANT-CHEM ORCHID FOOD
25c size makes 16 gal.	50c size makes 16 gal.
\$ 1.00 size makes 100 gal.	\$ 2.00 size makes 100 gal.
2.00 size makes 400 gal.	10.00 size makes 1200 gal.
15.00 size makes 5000 gal.	22.50 size makes 5000 gal.

POUR IT ON—WATCH 'EM GROW

**This year, DOUBLE the
life of your CUT Flowers**

with

FLORALIFE

FLOWERS LAST LONGER
HOLD COLOR, FRAGRANCE
NO WATER CHANGING

We offer you the original, patented cut flower food—**FLORALIFE**. Lives up to all claims. Sold with the manufacturer's money-back guarantee. Think of being able to double the job of gardening results . . . Just stir **FLORALIFE** into water. Presto! Life of garden or hot-house bouquets is doubled.



FLORALIFE will keep your cut flowers fresh and beautiful for 5 to 10 days after they otherwise would be on the trash heap!

FLORALIFE
Sent Postpaid

Per packet—enough to treat 2 qts. of water 10¢
Gift Box—15 ten-cent packets—enriches 30 qts. of water—a \$1.50 value for only \$1.
Jumbo Bulk Drum, enough to treat 100 qts. of water, complete with measuring cup, only

Include **FLORALIFE**
in Your Order.



**CHAMPION OWNERS INSIST ON
KEN-L-BISKIT
CONTAINING MEAT*!**

**THE ONLY DOG BISCUIT
OF ITS KIND IN AMERICA**

*Enriched with all vitamins known to be essential to dog health, Ken-L-Biskit has another PLUS feature that makes it a favorite. Wholesome, nutritious horse meat and meat meal are *baked right into this famous dog food*.

The favorite biscuit of dog owners everywhere, Ken-L-Biskit helps dogs to develop strong bones, sturdy muscles, and a silky, glossy coat. See how your dog will thrive on healthful Ken-L-Biskit with meat!



KEN-L-BISKIT
THE DOG FOOD OF CHAMPIONS

**PROTECT YOUR GARDEN WITH
THESE PROVEN PEST CONTROLS!**

Snarol Kills Snails



METALDEHYDE-ARSENICAL BAIT
Attracts and kills snails and slugs. Snarol may also be used to control Sowbugs, Cutworms, Earwigs, etc. A ready-prepared bait meal that is non-injurious to vegetation when used as directed. Retains its effectiveness for from five to ten days after being put out. 1-lb. packages, 25¢; 2½-lb. packages, 50¢; 6-lb. packages, \$1.00; 10-lb. bags, \$1.50; 50-lb. bags, \$5.50. Postage extra. Send for these pest controls today.

Save Gardens with

KILLS Aphids, Thrips, Leaf-hoppers, White Flies, Mealy Bugs, Red Spiders, Scales, Mites, Mexican Bean Beetles, Diamond Back Cabbage Worms, and certain Caterpillars.



"A LITTLE GOES A LONG WAY"



Marigold, Dwarf French Double, Spry

MARIGOLD (a)

Late in the season when many other growing things are past their prime, these plants supply an abundance of decorative blossoms. Their tones of orange and yellow blend well when the flowers are arranged loosely in bowls and vases. The bright green foliage is finely cut, and the stems are stout. Tall Marigolds give charm to the border, the dwarfs are valuable for bedding and edging plants.

AFRICAN TALL DOUBLE (*Tagetes erecta*). Very large globular flowers composed of compact tubular or quilled petals. The stems should be cut carefully to avoid the somewhat disagreeable odor when bruised. Height, 2½ feet.

All Double Orange. An improved strain which produces practically one hundred per cent double flowers. Pkt. 15c.

Lemon All Double. A fluffy fully doubled variety with pale yellow blooms loosely quilled. Pkt. 15c.

CARNATION FLOWERED, Guinea Gold (African). Carnation-like petals and unusually brilliant golden color makes this flower outstanding among Marigolds. It lacks much of the pungent odor of other Marigolds. The plant blooms very freely. Height, 2 feet. Pkt. 15c.

Gigantea, Full Double Mixture. Flowers are largest ever known in Marigold. A mixture ranging from deep orange through golden orange, deep golden yellow, light yellow, lemon yellow, and a delightful new shade of primrose. Pkt. 15c.

DWARF FRENCH Double Harmony Hybrid. Without question one of the very finest Marigolds introduced. Flowers charming and distinct. Scabiosa-like in formation with tubular deep orange center petals flanked by broad velvety dark maroon-brown guard petals. Plants are dwarf, about 1 ft. high, compact, free blooming. Early and attractive for cutting. Pkt. 15c.

Dwarf French, Flash. (Silver Medal 1945 All-America selection.) Single. Truly named because it is one of the most striking plants in the garden. Vivid 1½-inch flowers range from red, through bronze to yellow. Compact plants are covered with blooms from early summer until frost. Pkt. 25c.

Scarlet Glow. Single. 10 inches tall, well covered with flowers one and three-quarters inches across, which vary interestingly from deep scarlet to tangerine yellow. Pkt. 15c.

MISSION GIANT, Yellowstone. Honorable Mention, All-America Selections, 1942. Large, two and a half inch flowers of bright, rich, clear yellow, on luxurious, large plants. Flowers are of double, incurved, Chrysanthemum-like form, and very attractive. Blooms late and lasts until frost. Uniformly three to five feet tall. Mixed. Pkt. 15c.

NASTURTIUM (a)

Few garden annuals respond with as little care as the Nasturtium. For ease of culture, duration of bloom, brilliancy of coloring, they are unexcelled. All they need is a moderately good soil, in a well drained, sunny position and within a few weeks from the time they are sown until hard frost comes, there is an endless profusion of their gorgeous blossoms.

GLORIOUS GLEAM HYBRIDS. Delightfully sweet scented; double. Color range includes brilliant blend of salmon, golden yellow, orange scarlet, cerise, cream, orange, maroon and crimson shades. Pkt. 15c.

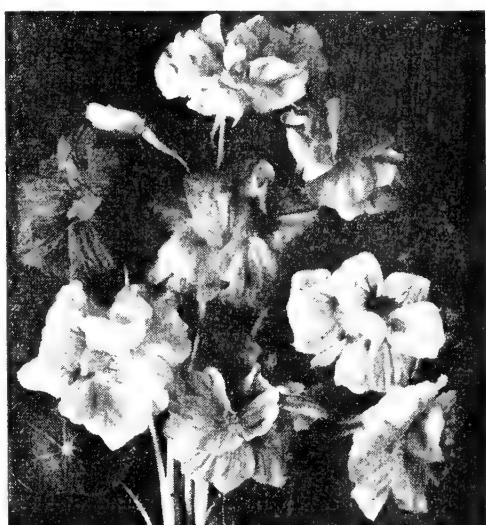
Golden Gleam. Golden yellow, sweet scented. Pkt. 15c.

Scarlet Gleam. Fiery scarlet. Pkt. 15c.

DWARF DOUBLE GEM MIXTURE. An evenly balanced range of colors on dwarf, compact gem-like plants. Ideal annual for border and edging use. Plants are dwarf and compact, totally without runners. Pkt. 25c.

DWARF OR BEDDING VARIETIES. Of dwarf, compact growth. Excellent for borders or for bedding, forming plants about 1 foot high by 1 foot across. Finest Mixed. Pkt. 15c.

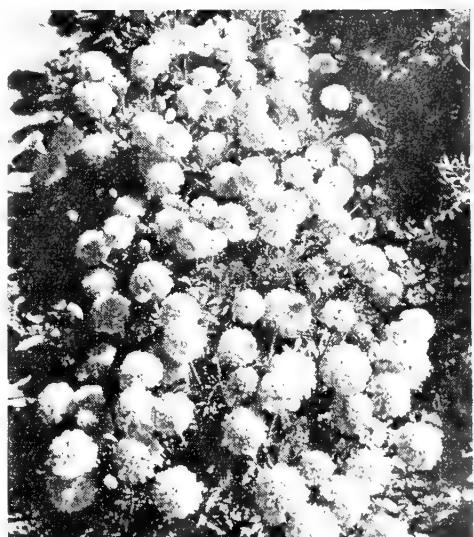
TALL OR CLIMBING NASTURTIUMS. For covering trellises, fences, arbors, trailing from vases, over rock-work, etc., nothing can equal their great quantities of bloom from early summer until frost. The seed pods can be gathered while green and tender for picking. Height, 8 to 10 feet. Finest Mixed. Pkt. 15c.



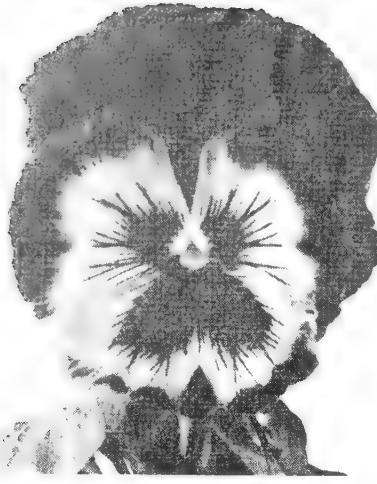
Nasturtium



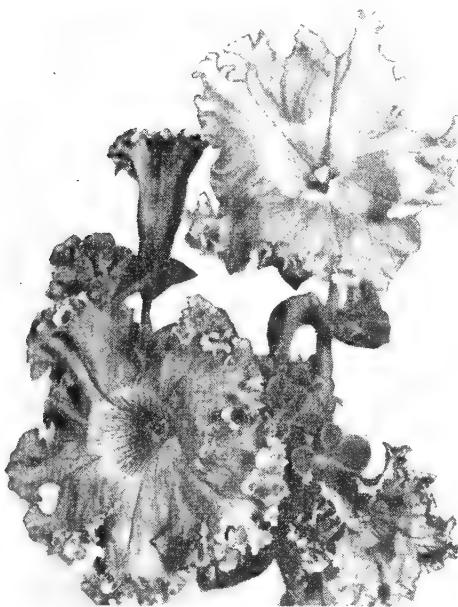
Morning Glory, Pearly Gates



Marigold, Harmony Type



Pansy



Petunia, Theodosia



NEMESIA (ra)

This plant is excellent for edging purposes. Plants send up many slender stalks crowned with fairy-like flowers, something like a Schizanthus. When the flowers fade they may be trimmed back and will bloom again. Their colors run from the brightest reds, yellows, oranges, to the brightest blues and purples. **Compacta Triumph, Finest Mixed Colors.** Pkt. 25c. Height 6 to 12 inches.

NEMOPHILA

Small cup-shaped blossoms which are fine ground cover for bulb beds. Grows about 6 inches high.

Baby Blue Eyes (Insignis Blue). Sky blue with white eyes. Pkt. 15c.

NIEREMBERGIA

(See Blue Fern Flower)

PANSY, Heart's Ease (b)

When the bright hues of the Tulips and Daffodils have faded, the rich, deep and varied shades of the Pansies provide a welcome change in the flower beds. The varieties listed produce large blooms of good substance, regular markings, and full rich coloring. Low growing.

Swiss Giant. Within the last few years the blossoms of this strain have been remarkably improved in every way. The plants are compact in habit and they produce immense circular flowers for a long blooming season. Attractive shades. Pkt. 50c.

Popular Bedding Mixture. These are the popular saucy-faced beauties that everybody loves, comprising the finest varieties in all colors. Pkt. 25c.

PETUNIA (a)

The seed may be started indoors early in the year in seed boxes and later transplanted or sown out of doors in the spring. Cover very lightly and apply water with a fine spray. Be careful not to discard the smaller and weaker seedlings. From these the finest flowers are often obtained, the coarse growing plants frequently reverting to the common types.

Ruffled Nana Compacta—Little Giants Mixed. These 8 to 10 inch plants remain so compact and erect all season that this new variety is destined to become the most popular of all Petunias for the home garden. Ruffled deep-throated flowers of medium size continue to keep the plants completely covered all season. 3-inch blooms in unusual colors range from deep crimson to white in unique shades and markings. Pkt. 50c.

HYBRIDA NANA COMPACTA. 1 ft. A fine type of Petunia for small beds and borders; often used for pot culture. This Petunia keeps its dwarf stature very well throughout the blooming season.

Rosy Morn. Soft, rosy pink with white throat. Pkt. 35c.

Heavenly Blue (Silver Blue). Enchanting shade of light silvery blue. Dwarf. Pkt. 35c.

Snowball. Flowers pure white. Pkt. 35c.

Velvet Ball. Deep mahogany red flowers, larger than others in this group. Pkt. 35c.

Mixed Pkt. 25c.

FOR YOUR ROCK GARDEN

ROCK GARDEN PERENNIALS Mixed

A mixture of over 50 rare rock garden perennials with a maximum height of six inches. Some of the items will bloom almost as soon as the frost is out of the ground. Others will bloom later in the year, insuring the grower blooms all season. A planting carefully made in a suitable place, should remain a beauty spot for a number of years without reseeding if given minimum care. Pkt. 50c.

DIANTHUS, Perennial Rock Garden Mixture

Twenty varieties of unusual species of dwarf perennials. When well grown, many plants will produce such an abundance of blooms that daily cutting of

PETUNIA GRANDIFLORA

(Large Flowered)

Elk's Pride. Very large, deep purple. Pkt. 35c.

Snowstorm Improved. Glistening white shading yellow in throat. Pkt. 35c.

PETUNIA LARGE FLOWERED FRINGED

Theodosia. Soft rosy pink with contrasting golden yellow veined throat. An outstanding variety in this class. Pkt. 35c.

PETUNIA FRINGED AND RUFFLED

Super Fluffy Ruffles. A new ruffled and frilled type of Petunia that has the appearance of being almost double. Flowers are very large with a deep throat. The mixture is well balanced with shades of pink and white, salmon, salmon pink, deep rose, rose, crimson, and light blue. Pkt. 50c.

RUFFLED GIANTS OF CALIFORNIA

Glamour. Honorable Mention, All-America Selections, 1942. Large flowers of salmon-rose with brown veining on white in the throat. An excellent color under artificial light and outdoors. Most flowers have wavy, fringed petals although a few come plain edged. Pkt. 50c.

Supreme Strain. A new strain of rose and pink shades. Light, richly-veined throats surrounded by satiny petals which are heavily ruffled. Large blooms, 5 to 7 inches in diameter, produced on strong, richly-foliaged plants. Excellent bedding variety; fine window box type. Pkt. 50c.

DWARF GIANTS OF CALIFORNIA

A dwarf sturdy growing type especially suited to pot culture. Flowers are beautifully ruffled and fringed with open well marked throats.

Ramona Strain. Dark and light shades mixed. Pkt. 50c.

PIN CUSHION FLOWER (See Scabiosa)

PINKS (a)

(DIANTHUS)

Plant in full sun in any good garden soil. Sow in spring when danger of frost is past.

Hedgewigii (Double). 10 inches. Very desirable pink in many color combinations for rock garden or borders. Pkt. 15c.

Dianthus Plumarius (Clove Pinks). Perennial. Double. Pkt. 25c.

Dianthus — Sweet Wivelsfield. Single mixed. Pkt. 15c.

ROCK GARDEN ANNUALS Mixed

flowers will not decrease the loveliness of the plant. With an occasional replacement of a plant, a well established planting should last several years.

ROCK GARDEN ANNUALS Mixed

This mixture of over 30 varieties, not exceeding 12 inches in height, will provide blooms through the entire season. Planted as early as possible, the gardener should have blooms by the end of May. A succession of blooms will follow until late fall when frost will destroy the flowers. A second lot of blooms may be enjoyed on most plants if they are cut back to two inches of the crown and properly watered.

Pkt. 25c

PHLOX DRUMMONDI (a)

A valuable and showy annual highly esteemed for bedding, for massing and for borders. The plants grow about 1 foot high, thrive in practically any soil if given a sunny location and bloom the entire season. Seed may be started in boxes and transplanted or sown in the open in spring.

Gigantea, Rosy Morn. Bronze Medal, All-America Selections, 1941. An extremely refreshing, gay and bright color combination of rose pink with a white eye. A color that will not fade in the strong sun. This new variety possesses the large sized blooms, the free flowering quality and the fine habit of both Gigantea Art Shades and Gigantea Salmon Glory. Pkt. 25c.

Gigantea, Salmon Glory. Silver Medal, All-America Selections, 1939. A good salmon in Phlox Drummondi Gigantea type. The individual florets are gigantic for Phlox, measuring from $1\frac{1}{4}$ to $1\frac{1}{2}$ inches in diameter. Color a pure salmon pink with a distinct creamy-white eye. One of the most beautiful color combinations ever seen. Pkt. 25c.

Gigantea Mixed. Pkt. 15c.

POPPIES, Papaver

Poppies have long been favorite garden flowers for their delicacy, as well as the simplicity of the buds and neatness of the foliage. The pure colors and fine texture of the petals make a good showing in the garden. All are easily raised from seed which should be sown where the plants are to remain, later thinning to 8 or 12 inches between plants. In the North, sow in the open ground as early as possible in the spring; in California, sow from October to March.

Oriental Poppies. (p) Hardy perennial plants with numerous leafy stems about $2\frac{1}{2}$ feet bearing large showy flowers with a conspicuous black blotch on each petal. Mixed, Pkt. 25c.

SHIRLEY (a). The most charming Poppy for the garden. The plants, with their deeply cut foliage, slender, hairy stems and silky petalled blossoms, often fluted, present a gay, airy picture. Height, 18 inches.

Sweet Brier (Double Annual Shirley). Full, double begonia-like flowers of a beautiful deep rose pink. One of the finest strains of double Shirleys for the garden. Pkt. 15c.

All Double Mixed. Mixture of the best colors. Full double and semi-double flowers in a great variety of colors. Pkt. 15c.

Single American Legion. Dazzling scarlet with white cross at center. Best substitute for the wild Flanders Poppy. Pkt. 15c.

Single Mixed. A superb blend of this beautiful type of Poppy ranging in color from pure white through tones of salmon, pink, and rose to brightest carmine-red. Pkt. 10c.

ICELAND POPPY (p) (*Nudicaule*). A hardy Poppy slightly resembling the Shirley. Different in habit and contains many shades of yellow and orange. Height, 18 inches.

Gartford Giants. A superb mixture. All colors. Pkt. 25c.

CALIFORNIA POPPY, *Eschscholtzia* (a)

The state flower of California and one of the most attractive low growing annuals. The foliage is finely cut, fern-like, and silvery green in color. They start to bloom a few weeks after the seed is sown. Height, 12 to 18 inches.

Grandiflora Hybrids. Large flowering varieties in the most exquisite shades of gold, copper, bronze, scarlet, purple and crimson. Mixed Colors. Pkt. 10c.

Ramona Hybrids. A new strain containing many lovely shades. The plants grow compact and upright, with flowers beautifully frilled. Mixed Colors. Pkt. 10c.

Aurantiaca, Orange. The ordinary California Poppy. Pkt. 10c.

PORTULACA, Moss Rose (ra)

Brilliant hardy annual of easy culture; excellent for massing in beds, edging or rock work, thriving best in a light, sandy soil and a sunny situation. Flowers of the brightest colors. Height, 6 to 10 inches.

Double Mixed. Pkt. 25c.

Single Mixed. Pkt. 25c.

SATINFLOWER (See Godetia)

SALPIGLOSSIS (a)

Painted Tongue

For delicate grace, richness of coloring, and velvety texture, the regal salpiglossis has practically no equal. From a low base of leaves rise slender wiry stalks which bear one or more large Lily-like flowers in a magnificent range of colors. Height, 1 to $2\frac{1}{2}$ feet.

Superb Mixed. Pkt. 15c.



Salpiglossis

POT MARIGOLD (See Calendula)

RED HOT POKER, Tritoma (p)

A perennial, not strictly hardy, but will live through the severe winters with a protective covering of leaves or manure; or the roots may be lifted and carried over winter in sand in a cellar. Height, 4 to 6 feet. It harbors gladiolus thrips.

Mixed Hybrids. Pkt. 15c.

SALVIA, FLOWERING SAGE

Scarlet sage is usually treated as an annual. Start the seed from January to May, and set out plants when weather becomes warm. Perennial in mild climates.

Bonfire. The crimson spikes grow erect above the foliage forming handsome globular bushes. Pkt. 25c.

SCHIZANTHUS (See Butterfly Flower)

SCABIOSA (a)

Pin Cushion Flower

These beautiful hardy annuals are in great demand. They grow about $2\frac{1}{2}$ feet high and bloom from early in July without interruption until cut down by the frost. As a flower for cutting they are very popular. Seeds should be sown any time in the spring after danger of frost is past.

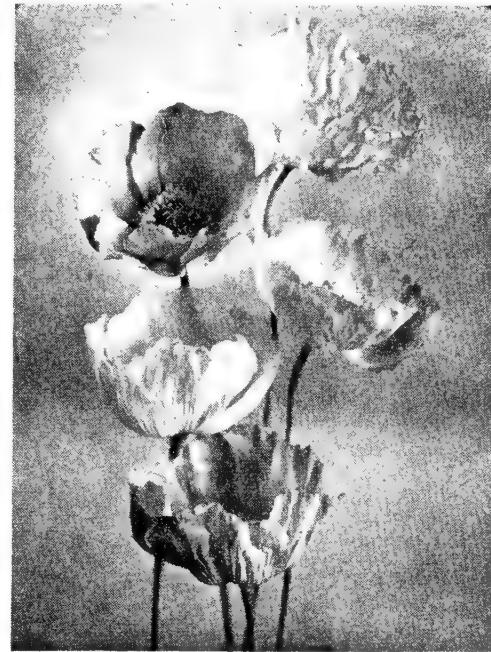
Rosette. A beautiful Scabiosa of deep rose suffused with salmon. A "must have". Pkt. 15c.

Salmon Beauty. Pure salmon with huge flowers. Vigorous. The stems are long and stiff, making it a most popular flower for the garden or for cutting. Pkt. 15c.

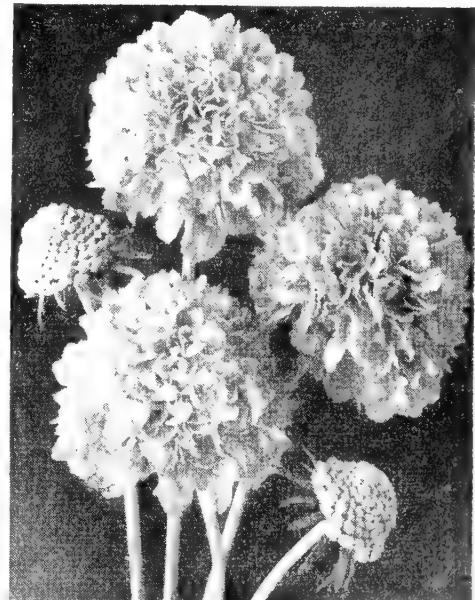
Imperial Giants, Blue Moon. An entirely different and improved flower and plant from the existing Scabiosa varieties. Fully double, extremely large and deep. Petals broad and wavy, entirely eliminating the pincushion center; rich deep lavender blue. Tall growing and very upright with long, wiry, heavy stems in which the weak neck of the older types is completely eliminated. Ideal for cutting. Pkt. 15c.

Shasta. Pure white, very large flowers. Pkt. 15c.

Giant Hybrids. Mixed. Pkt. 10c.



Iceland Poppies



Scabiosa, Blue Moon



Protect your beautiful garden...

*Check your needs for these
ORTHO pest control products*



MULTI-PURPOSE SPRAY

ORTHO Garden Spray Set. For use against more prevalent GARDEN INSECTS.

Set contains 4-ounce bottle of EXTRAX Insect Spray, GREENOL Liquid Fungicide and VOLCK Oil Spray. Makes 25 gallons Multi-Purpose Spray.....\$1.85

MULTI-PURPOSE DUST

BOTANO Garden Dust. For use against many insects and diseases. One of the safest multi-purpose dusts that can be used. 10-oz. size also serves as handy garden duster. Includes ROTENONE and PYRETHRUM.

10-oz. Duster, 59¢ 2-lb. Pkg., \$1.00

MULTI-PURPOSE BAITS

BUG-GETA Pellets. For use against PRINCIPAL FORAGING PESTS.

Slugs, Snails, Cutworms, Earwigs, Grasshoppers, Strawberry Root Weevil. Baiting against these pests is easy with the new BUG-GETA PELLETS Compressed BAITS. 5000 baits in a 2-pound carton.

12-oz. Carton, 35¢ 2-lb. Carton, 65¢
5-lb. Carton, \$1.25 25-lb. Bag, \$4.40

APPO Cutworm Bait. A new poisoned Apple bait. Kills Cutworms, Strawberry Root Weevil; also Vegetable Weevil, Slugs, Snails.....1-lb. Carton, 35¢

CALTOX Garden Dust "525". Especially useful on Tomatoes, Potatoes, Cucumbers, Squash, and Melons. Contains Cryolite, Copper and Zinc.

10-oz. Dual Purpose Package 49¢
2-lb. Package 85¢

VOLCK Oil Spray. Envelops, wets and smothers many sucking insects. Also spray carrier for other sprays.

4-oz. Bottle, 25¢ 1-Pint Bottle, 50¢
1-Gallon Can \$2.25

ORTHOL Garden Spray. (GARDEN VOLCK with DDT.) Kills Aphids, Thrips, Mealybugs and many other insects.

4-oz. Bottle 49¢

ORTHO Sowbug Killer. A specially prepared bait for use against Sowbugs and Pillbugs..... 1-lb. Can, 50¢

ORTHO Ant and Roach Powder. A Fluorine-Pyrethrum Insecticide for use against Ants, Roaches, Silverfish. Easy to use..... 4½-oz. Shaker, 25¢

ANT-B-GON Ant Poison. Four to eight Dispensers are enough for average home. Easy to refill. Ants feed from "WICK".... can't get inside. For Argentine and Sweets-eating ants. Set of four 1-oz. Dispensers 60¢
Ant poison to refill dispensers:
4-oz. Bottle, 25¢ 1 Pint, 60¢

EXTRAX Insect Spray. Contains Rotenone and Pyrethrum. Kills by contact insects such as Aphids, Beetles, Caterpillars, Thrips.

4-oz. Bottle, \$1.00 1 Pint, \$2.75
½ Gallon \$7.95

TWO NEW DDT INSECTICIDES

PEST-B-GON Insect Spray. Contains 20% DDT. Kills Beetles, Worms, Thrips, Ants, Leafhoppers; also Houseflies (as screen paint), Mosquitoes, Fleas. 4-oz. Bottle, 65¢ 1 Pint, \$2.00

PEST-B-GON Insect Dust. Contains 10% DDT. Kills many Thrips, Plant Bugs, Beetles, Worms, Leafhoppers — Fleas, Bedbugs, Roaches, Silverfish, Ants.... 10-oz. Duster Package, 60¢

ORTHO Lead Arsenate. A stomach poison for use as a spray or dust... 1 lb., 40¢

GREENOL Liquid Fungicide. A copper fungicide used to prevent Powdery Mildew..... 1 Pint, \$1.50
4-oz. Bottle, 60¢ ½ Gallon, \$5.00

"ORTHO" BORDO Mixture. Prepared Bordeaux Mixture..... 1 lb., 40¢

FLOTOX Garden Sulfur. Finely powdered. Use as a dust or spray... 26 ozs., 35¢

CONTAX Sealing Compound. Protect cuts and tree wounds. Also has many other uses..... 1 Gallon Can, \$1.50

ORTHO Rose Spray Kit. Special Combination Offer. Contains 2-oz. bottle "EXTRAX" for Aphids and other insects and 2-oz. bottle "GREENOL" to prevent certain Powdery Mildews. Makes 12 gallons spray. Used for vegetables, too..... Each Kit, \$1.00

ORTHO Soil Fumigant. To control Cabbage and Onion Maggot, Sod Webworm. 4-oz. Bottle, 35¢ 1 Pint, \$1.00

TRIOX Weed Killer. Poisons soil and prevents weeds from growing. Use on driveways, walks, and other places where no vegetation is wanted.

½-Gal. Can, \$1.50 1-Gal. Can, \$2.40

WEED-B-GON Weed Killer. Contains 2,4-D. A hormone spray for killing Wild Morning-Glory (Bindweed), Poison Oak, Poison Ivy, Plaintain, Dandelion. Use on grass lawns (not Dichondra, Lippia or Clover).

4-oz. Bottle, 49¢ 1 Pint, \$1.50
½ Gallon \$4.00

ORTHO Rat Bait Pellets. Ready-to-use Red Squill Baits. Poisoned Rats seek underground burrows before dying.

2-oz. Carton, 35¢ 6-oz. Carton, 50¢

ORTHO Rodent Destroyer. Kills Gophers, Squirrels, Prairie Dogs, Rats, Mice. This bait is poisoned with strichnine. 6-oz. Carton, 35¢ 1-lb. Carton, 60¢

SCRAM Dog Repellent. A special powder used to keep dogs away from shrubs, flowers, lawns, store fronts, porches, etc. Easy to use. Does not harm animals..... 8-oz. Shaker, 49¢



ORTHO
SCIENTIFIC PEST CONTROL
REG. U. S. PAT. OFF.

SNAPDRAGON, Antirrhinum (a)

Snapdragons are fascinating flowers with their interesting form and glowing colors. They are easy to grow and will bloom continuously until severe frost, making a wonderful display and supplying unlimited cut flowers. Ordinary good garden soil will produce fine Snapdragons either in full sun or semi-shaded spots. Sow outdoors when danger of frost has passed or indoors six weeks earlier.

SUPER GIANTS, RUST RESISTANT

Campfire. Luminous scarlet. Pkt. 25c.
Copper Queen. Bronzy copper. Pkt. 25c.
Crimson. Fiery crimson. Pkt. 25c.
Paradise Rose. Rose pink. Pkt. 25c.
Rosalie. Rich deep rose with underlying tone of topaz or amber. The plants are base branching and produce from 6 to 8 huge long flowering spikes on which the florets are decidedly well arranged. An all-purpose Snapdragon. Pkt. 25c.

Swing Time. The loveliest rose pink imaginable with a bright yellow touch and a white tube. Spikes are huge, beautifully tapered and evenly packed with immense blooms. Pkt. 25c.
Yellow Giant. Deep yellow. Pkt. 25c.

Finest Mixed. Pkt. 15c.

Tetra. Largest flowered of all snapdragons, many individual flowers are ruffled. Seed comes in a superfine mixture including all the best snapdragon shades: orange, yellow, peach, canary, bronze, orchid, crimson, scarlet, pink, white. Main spike 2½ feet tall with many laterals. Excellent for cutting. Pkt. 25c.

STOCKS, Gilliflower (a)

These popular flowers are easily grown, are so highly fragrant, and of such great beauty that they deserve a place in every garden. The Early Giant Imperial class are half-hardy annuals. Beauty Stocks are biennials, but if sown in early spring will bloom the same year. They are also valuable for winter forcing. In California Stocks are popular winter annuals.

Double Large Flowering Dwarf Ten Weeks. A wonderful strain for bedding. Pkt. 15c.

Beauty of Nice. It follows the Ten Weeks class in season of bloom. The plants are pyramidal in shape, branching above the base. Excellent for bedding and cutting. Height, 16 inches.

Finest Mixed Colors. Pkt. 15c.

GIANT IMPERIAL. Long stems and imposing spikes of large flowers make this the outstanding variety. It is about as early as Beauty of Nice and resembles it in habit, except that the plant is less spreading and taller. Height, 2 feet.

Yellow (Buttercup). Pkt. 25c.

Blood Red. Pkt. 25c.

Rose. Pkt. 25c.

Lavender. Pkt. 25c.

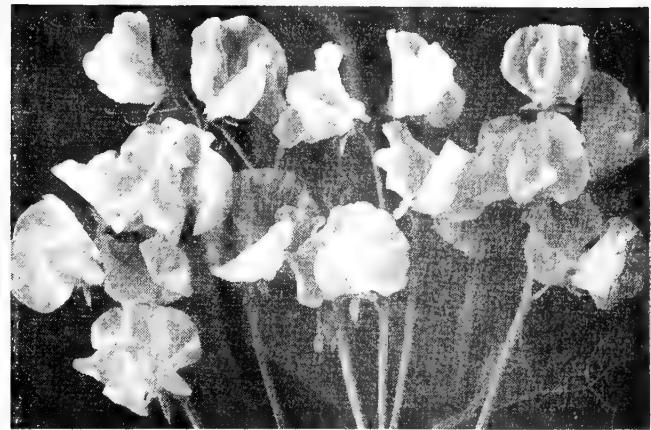
White. Pkt. 25c.

Finest Mixed Colors. Pkt. 15c.

EVENING SCENTED STOCKS

The flowers are small, mauve colored, similar to the Virginian stocks but are delightfully fragrant toward evening. They are especially sweet after a rain. **Matthiola Bicornis.** Pkt. 10c.

SWEET PEAS



Giant Summer Flowering Spencers

CHOICE MIXTURE SPENCER SWEET PEAS

Pkt. 10c; Oz. 50c.

ALL COLORS: PKT. 15c; OZ. 75c. PINK AND ROSE SHADES

Rose Pink. Silver Medal, All-America Selections, 1940. Large, wavy, rose-pink flowers on white ground. New type, maturing between the early flowering and the Spencer classes. Is taller and has longer stems than either of the others.

Pinkie. Rose-pink with large and frilled flowers. This variety is seldom affected by weather conditions and first-class blooms can be cut all during its long blossoming period.

Jack Hobbs. Cream-pink, flushed scarlet. One of the largest Sweet Peas ever introduced.

Miss California. The color is a beautiful shade of rich pink, deeply flushed and shaded with salmon. Unsurpassed for either exhibition or general cutting purposes.

Youth. This Sweet Pea can be described as a white ground Picotee but with slightly deeper color on the edges than its predecessor in this group. Strongly perfumed.

LAVENDER AND BLUE SHADES

Ambition. Rich deep lavender, with a darker shade on the base of the standard and wings when young, lessening as the bloom ages. Gold Medal and Award of Merit.

Powerscourt. A clear pure lavender. Has been considered the best lavender for a number of years. It is still the most popular. The flowers are very pure in color.

Reflection. A beautiful shade of clear blue.

WHITE AND CREAM SHADES

Gigantic. An enormous white frilled flower of exquisite texture and artistic form. Black seeded.

Cream Gigantic. Large ruffled flowers of perfect form, free from pink or blush tinge. Black seeded.

CULTURE OF SWEET PEAS (a)

Sweet Peas are deep rooting and heavy feeding plants. We recommend a trench to be dug about 18 inches deep and 18 inches wide. In the bottom fork in about 6 inches of well-rotted manure. Fill in with soil in which is mixed a liberal quantity of well-rotted manure.

The actual sowing is done in a shallow trench 6 to 8 inches deep. Cover the seeds with 2 inches of soil and press firmly. The balance is filled in as the plants grow, thus establishing deeper roots than would otherwise be possible. Use one ounce of seed to 20 feet of the row and later thin out so that the plants will be 4 to 5 inches apart.

GIANT WAVED SWEET PEAS CHOICE SPENCER MIXED

This mixture is grown from a special formula which has been built up and perfected during many years. It contains over forty of the very best standard varieties of the most recent introductions, all waved and giant flowering. Pkt. 15c.

If flowers are kept picked and seed prevented from forming more and better bloom will be produced. Avoid overhead watering as it causes the flower buds to drop.

Time of Sowing: Spencer varieties may be sown in early October and lightly mulched in winter. Fall sowing gives finer flowers and longer stems and a slightly longer period of bloom.

In California, Early Flowering varieties are sown about August 1 and throughout the winter months. If sown in August, they will bloom by November. Keep the surface of the bed cool by using a light mulch.

STRAWFLOWER and IMMORETELLE

HELICHRYSUM. (a) The finest of all Everlastings. They make unusually fine winter bouquets if cut when partially opened and dried slowly in a dry place, heads downward to keep the long stems straight. The centers of the double pompon-like flowers are nearly covered by the stiff overlapping petals. A wide range of brilliant and soft colors. Height, 2 to 3 feet. Finest Mixed. Pkt. 15c.

SUNFLOWER, *Helianthus* (a)

Well known and popular plants, the small flowering sorts being useful for cutting. The tall varieties are valuable for backgrounds. Will thrive in the hottest places.

Sun Gold. New. Large double flowers of brilliant golden yellow. Free flowering. Pkt. 10c.

Red Sunflower. Tall single flowered variety with bright red blossoms. Pkt. 10c.

SWEET SULTAN, *Centaurea* (a)

These beautiful long stemmed flowers with their soft velvety heads make very enchanting bouquets. They measure 2 to 2½ inches across while the entire plant stands about 2½ to 3 feet tall. You can grow them readily in any garden soil, and your friends are sure to admire them. Mixed. Pkt. 10c.

SWEET WILLIAM, *Dianthus Barbatus* (b)

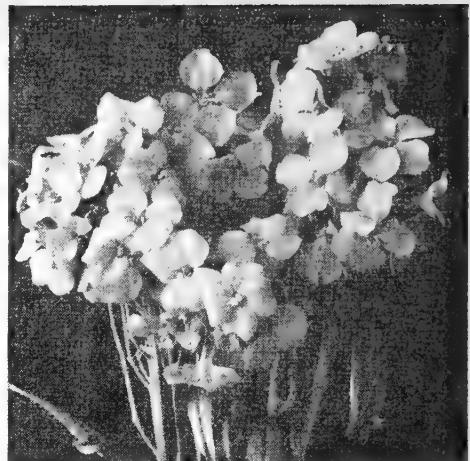
A well known, attractive, free-flowering hardy biennial, producing a splendid effect in beds and borders with their rich and varied flowers. Height, 10 to 20 inches.

Single Varieties. Mixed. Pkt. 15c.

Double Varieties. Mixed. Pkt. 25c.

WALLFLOWER, *Cheiranthus*

English Wallflower (p). Spring blooming low erect perennial, in appearance much like stocks but flowers include yellow, yellow-brown, red and almost black. Sweetly fragrant. In mild climates plant in fall for early spring bloom and where winters are severe they should be carried over in a frame and set out early in spring. May be sown early in March for bloom the first year but the former method gives better flowering plants. Pkt. 15c.
Siberian Wallflower (*Cheiranthus Allion*). (b) This unusual little plant deserves a place in your rock garden or low border. Upright spikes bear numerous four-petaled flowers of dazzling rich orange. Flowers the first season from seed and when established will bloom all summer. Height, 1 foot. Single. Pkt. 15c.



Siberian Wallflower



Zinnia, California Giants



Zinnia, Fantasy Wildfire

ZINNIA (a)

One of the most showy and satisfactory of our hardy annuals for beds, mixed borders and for cutting purposes. Easy to grow in any good garden soil. They commence flowering early in the summer and continue until frost.

SUPER CROWN OF GOLD, Pastel Tints. The finest large-flowered Zinnia, with large well formed flowers. Contains a wide range of pastel shades, including soft yellow, old gold, light pink, various shades of salmon, peach, and buff, cerise salmon, white, and cream, each petal overlaid at the base with deep golden yellow. Flowers are borne profusely throughout the season on strong, robust plants. Mixed shades. Pkt. 15c.

DOUBLE DAHLIA FLOWERED. 2½ feet. Enormous double flowers are produced on robust branching plants. The flowers usually have slightly hollowed center ringed with small tubular florets. Crisp, fresh appearance.

Dream. Deep rosy lavender. Pkt. 15c.
 Exquisite. Light rose, deep rose centers. Pkt. 15c.

Golden Dawn. Golden yellow. Pkt. 15c.
 Illumination. Deep self rose. Pkt. 15c.

Oriole. Orange and gold bicolor. Pkt. 15c.

Polar Bear. White. Pkt. 15c.

Scarlet Flame. Bright scarlet. Pkt. 15c.

Will Rogers. Brilliant scarlet red. Pkt. 15c.

Mixed. Pkt. 10c.

RED RIDING HOOD. 1 ft. of compact form covered the entire season with double scarlet flowers not over an inch across. Highly effective borders. Pkt. 15c.

CALIFORNIA GIANTS. This variety is taller than the Dahlia flowered type, 3 to 4 feet high, with long stems which make the flowers fine for bouquets. The blooms are large and flat and very graceful. Finest Mixed Shades. Pkt. 15c.

FANTASY. A new Zinnia type. Shaggy, medium sized flowers. Plant 2½ to 3 ft. high. Free blooming. Excellent cutting.

Wildfire. A rich, dazzling scarlet. Wildfire adds a distinct note of color and cheerfulness to the garden and will enliven any home when used in flower arrangements. Plants neat in habit, strong growing, and very free blooming, 2½ to 3 feet in height; coming into flower 45 to 50 days after seed is sown. Pkt. 15c.

DOUBLE LILLIPUT. 12 inches. A charming dwarf which is excellent for low borders or edgings. The plants are of tidy habit and produce a bounteous supply of very double pompon flowers about 1½ inches across. The colors are bright. Mixed. Pkt. 15c.

LINEARIS. This little dwarf variety of Zinnia is most unusual and interesting. The flowers are single and of a lovely shade of golden orange, with a delicate lemon yellow stripe through each petal. Blooms are produced in great profusion. Height, 8 to 10 inches. Pkt. 15c.

VERBENA (a)

One of the most popular garden annuals for beds and massing and for a gorgeous display during the summer months. Cannot be excelled, commencing to flower in July and continuing until frost. Height, 6 to 8 inches.

Spectrum Red. The brightest Verbena in existence. The huge flowers are an intense bright red, and having no eye, the color is intensified and its brilliance is quite dazzling. Pkt. 25c.

Brightness. A bright rosy cerise scarlet, large white eye, semi-compact. Pkt. 25c.

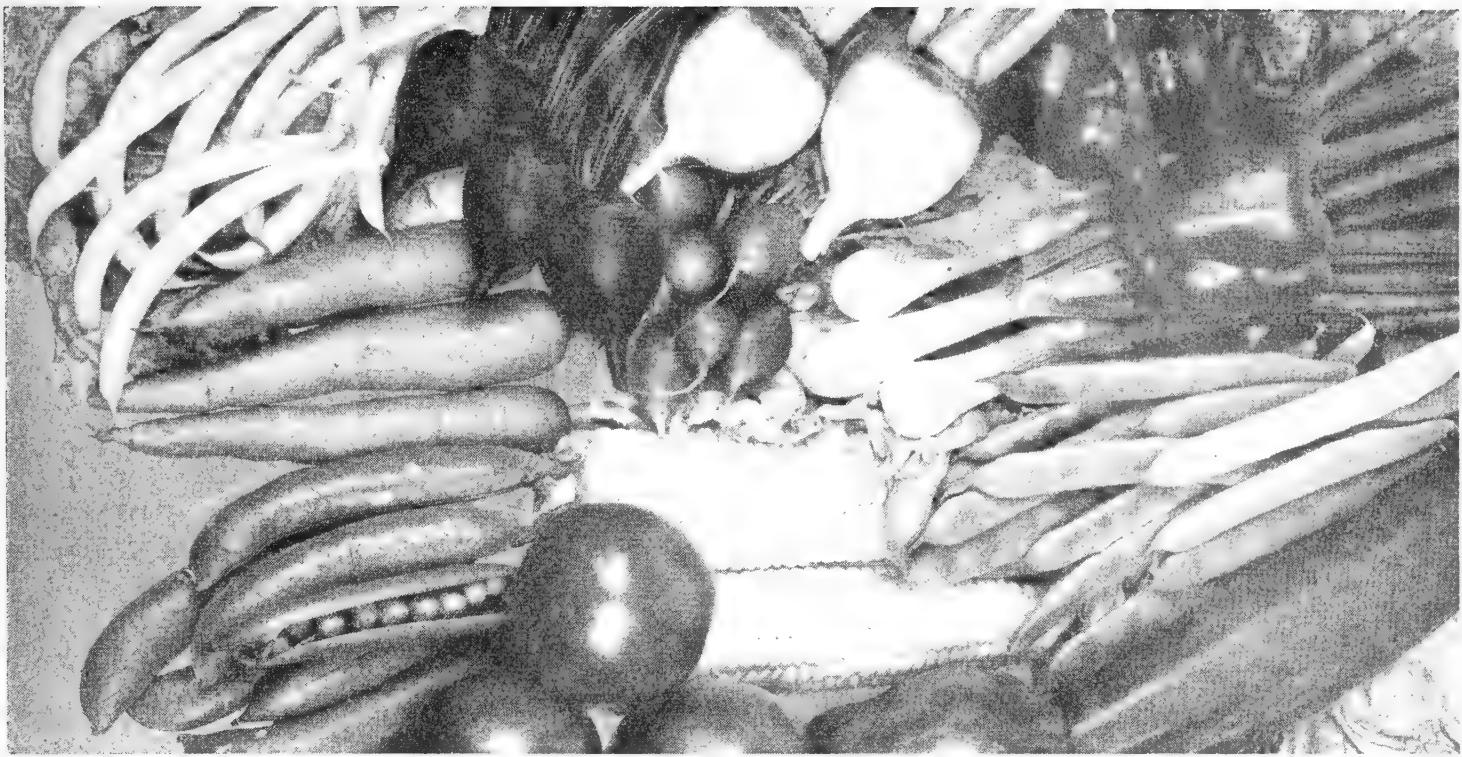
Floradale Beauty. A giant hybrid, the flowers varying from bright rose-pink to deep rose-red of exceptional brightness. Individual florets of perfect form, fully rounded, and average 1¼ inches across; heads or trusses 4 to 5 inches across. Pkt. 25c.

Lavender Glory. Immense lavender colored flowers with creamy white eye. Varies somewhat, a small percentage being pure white. Pkt. 25c.

Hybrid Grandiflora Giant. Mixed shades. Pkt. 15c.

VIOLA, Tufted Pansies (a)

Waller Franklin Formula Mixture. This blend of bright gay colors far surpasses any mixture of Violas we have seen. Bright shades of self colors of red, yellow, blue, and apricot combined with many shades which are blotched, undoubtedly make these Violas a supreme mixture. Pkt. 25c.



VEGETABLE SEEDS

ASPARAGUS

1 oz. to 100 ft., 4 lbs. per acre.

When starting an asparagus bed from seed it is advisable to soak the seed for 24 hours before planting. This makes germination more rapid and certain. Sow in spring in rows about 18 inches apart, allowing 15 to 20 seeds to the foot. Cover with 2 inches of soil. The plants will be ready to set in a permanent bed the following spring.

Mary Washington. The most extensive grown variety. Large green spears with tight, purple-tinted tips, of fine quality. Heavily productive and very uniform. Pkt. 10c; oz. 25c.



Beans, Bush, Green Pod



Beans, Bush Golden Wax Pod

BEANS

Bush, 1 lb. to 150 ft., 50 to 60 lbs. per acre.
Pole, 1 lb to 150 hills, 30 to 35 lbs. per acre.
Lima, 1 lb. to 150 ft., 30 to 50 lbs. per acre.

Bush, Green Pod

Prices: Pkt. 10c; $\frac{1}{2}$ lb. 20c; 1 lb. 35c.
Dwarf Horticultural. Particularly desirable green shell and snap bean for home and market garden. Plant medium high, thrifty and productive. Pods dark green at snap stage (53 days) becoming greenish.

Improved Stringless Green Pod. High quality for home and market garden. Plant large, thrifty, heavily productive. Pods medium green, $5\frac{1}{2}$ inches long, almost $\frac{1}{2}$ inch wide and equally thick. Very fleshy, strictly stringless, fine grained, tender. Seeds coffee brown. 53 days.

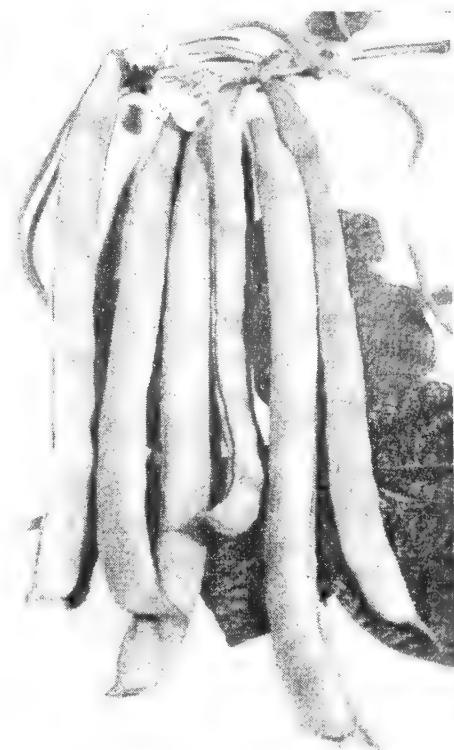
Tendergreen (Improved Refugee). A bush bean of utmost value. The plants make a strong and vigorous growth. They are well branched and carry a great quantity of beautiful light green beans. The pods grow 6 to 7 inches long. They are round, extremely meaty, and

tender. Even when fully grown they are absolutely stringless. Ripen in 54 days.

Bush, Wax Pod

Prices: Pkt. 10c; $\frac{1}{2}$ lb. 20c; 1 lb. 35c.
Average maturity 52 days from seed.
Black Wax, Pencil Pod. Very desirable for home and market garden and for truckers. Plants large and thrifty. Heavily productive over long period. Pods handsome bright yellow, $5\frac{1}{2}$ to 6 inches long, $\frac{3}{8}$ inch thick, cylindrical; very fleshy, stringless, brittle, fine grained, and tender. Quality unexcelled. Seeds black.

(Continued on page 16.)



Beans, Kentucky Wonder, Pole

BEET

1 oz. to 100 ft., 4-6 lbs. per acre.

Seeds should be sown at the rate of 1 ounce to 100 feet of row. The rows should be spaced 14 to 24 inches apart. Work the soil well and plant the seeds about an inch deep. A rich sandy loam is most favorable, but nearly all types of soil will produce beets if sufficiently fertilized and properly tilled. All varieties of beets sell for: Pkt. 10c; 1 oz. 35c.

Detroit Dark Red. The standard of excellence in table beets for home and market garden, for shipping, and for canning. Tops uniform, small, slender, erect. Roots globe shaped; symmetrical, with small collar and small tap-root. Very dark blood red. Mature in 52 to 55 days.

Early Wonder. Very desirable for home and market garden. Tops small. Root flattened globe shape and small collar and tap-root. Dark purplish red. Flesh deep purplish red zoned a lighter shade. Mature in 50 to 55 days.

Extra Early Flat Egyptian. Best for forcing and particularly valuable for early market. Tops small and upright. Roots flattened, with long slender tap-roots. Flesh dark purplish red zoned darker. Ready in 50 days.

Mangel (or Stock Beet)

1 oz. to 100 ft., 6 to 10 lbs. per acre.

Valuable as stock feed. Plant early in the spring in rows 2½ feet apart. The seeds should be 1 inch apart in the row and covered by 1½ inches of soil firmly pressed down. Cultivate frequently. When the plants are 3 inches high, begin to thin until the roots are 10 inches apart. All varieties of mangels: **1 oz. 25c; ¼ lb. 75c.**

Danish Sludstrup. Very high yielder. Roots long oval, orange colored; flesh white with faint yellow tinge.

Giant Half Sugar. This variety is one of the favorites among the dairymen and hog raisers. It is very sweet and nutritious, as it has a higher sugar content than the ordinary mangel.

True Sugar Beet. The most desirable beet for sugar manufacture. Valuable for stock feeding. Roots medium large, 12 to 15 inches long, 3½ to 4 inches at shoulder, tapered; white, with a tinge of gray; very rich in sugar. Good keeper.

BROCCOLI

½ oz. to 100 ft., 4 oz. per acre.

This is similar to cauliflower in color, character of foliage, form, and size of heads. It requires a long growing season and is especially suited to Pacific Coast states. Pkt. 10c.

Italian Green Sprouting. This vigorous plant is entirely different from the white heading sorts. Cultivated like cabbage, it bears a succession of sprouting heads which, if kept cut, will be replaced by others for 8 to 10 weeks. Each sprout, about 5 inches long, ends in a small head of dark green buds. It is one of the most delicious green vegetables.

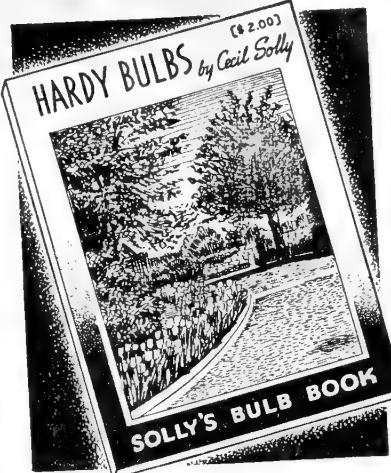
St. Valentine. Standard market variety for March shipment. Plants large. Heads large, solid, white, and very well protected.

BRUSSELS SPROUTS

½ oz. to 100 ft., 4 oz. per acre.

The small shoots like miniature cabbages clustered around a stem are the valuable part of this unique member of the cabbage family. They are successfully grown wherever conditions are favorable for late cabbage and require the same method of culture. They mature best in the autumn after the weather becomes cool. Pkt. 10c.

Dwarf Improved. Plants dwarf and compact, 20 inches tall. Very uniform; stem well covered with firm, round cabbage-like balls 1½ to 1½ inches in diameter mature in succession. Pick as needed.



SOLLY'S HARDY BULBS

This book contains full directions for the culture of all SPRING FLOWERING BULBS. It is written expressly for the home gardeners who want to have a year-after-year display of fine bulb-flowers. Complete with many illustrations, diagrams and plenty of colored pictures of the inexpensive lovely sorts that every gardener will feel proud to grow.

PRICE \$2.00

GROWING VEGETABLES IN THE NORTHWEST

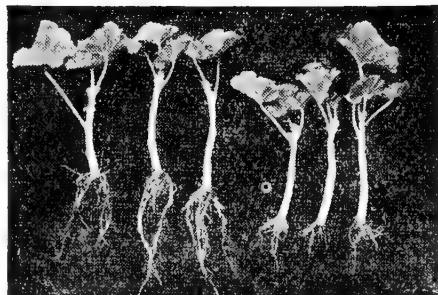
A new revised edition of Mr. Cecil Solly's popular book. Contains 144 pages of practical information on gardening. How to grow, sorts to use, control of pests and diseases, hotbeds, cold frames, use of land and other vital subjects for the amateur. Well illustrated with cuts and diagrams.

PRICE \$1.00



SOLLY'S GARDEN NOTE BOOKS

No. 1. LAWN—How to plant and care for a lawn of perfect turf here	25c
No. 2. ROSES—Roses are easy to grow, provided you start right	25c
No. 3. FRUIT TREES—How to plant and care for fruit trees in any garden. Lists best varieties	25c
No. 4. BERRIES—Growing berries in the home garden is easy and produces heavy crops	25c
No. 5. BUSH FRUITS—How to grow Blueberries, Grapes, Figs, Gooseberries and Currants	25c
No. 6. CAMELLIAS Rhododendrons needs in this area are completely discussed	25c



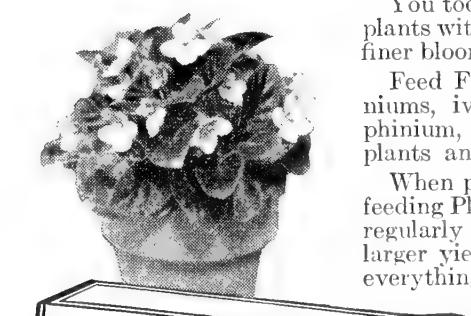
Geranium Cuttings. Treated and Untreated

Rootone

Reg. U. S. Pat. Off.

ROOTONE, the plant hormone powder. Dip cuttings in Rootone before planting to give faster, better, more successful rooting. Mix flower, vegetable or grass seed with Rootone before planting to give faster growth and stronger roots. Easy to use. ¼ oz. packet 25c, 2 oz. jar \$1.00, 1 lb. can \$5.00.

THIS GORGEOUS INDOOR PLANT WAS GROWN WITH PLANTABBS



You too can have a new fresh beauty in house plants with lovely green, bushy foliage and larger finer blooms.

Feed Fulton's Plantabbs to your ferns, geraniums, ivy, cacti, African violets, roses, delphinium, dahlias—in short, to all your indoor plants and garden flowers. Get magic results.

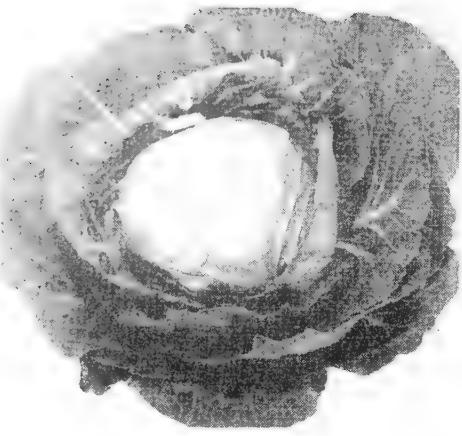
When plants are well out of the ground, begin feeding Plantabbs to all VEGETABLES. Repeat regularly to maturity and gather a finer, earlier, larger yield of tomatoes, beans, peas—in fact, everything in your garden.

FULTON'S PLANTABBS are odorless, concentrated, high analysis, white TABLETS providing a complete, easy to use, balanced PLANT FOOD plus VITAMIN B1. Easily made into liquid fertilizer if desired.

Box of 10 tablets 10c; 30 tablets 25c;

75 tablets 50c; 200 tablets \$1;

1000 tablets \$3.50



CABBAGE

½ oz. to 100 ft., 4 oz. per acre.

For plants of early kinds, sow seed in January under glass, and put out into flats about 2 inches apart. Transplant to open ground as early in the spring as the soil can be prepared, setting 1½ to 2 feet apart, in rows, which should be 3 feet apart. Cultivate frequently, and during dry weather water copiously. Late cabbage seed should be sown in drills in open ground during April and May, and transplanted in June or July. Fertilize heavily, using 400 pounds nitrate of soda per acre in three dressings, one-third when plants are set out, and two-thirds a month apart later.

EARLY VARIETIES

Mature between 60-65 days.

Copenhagen Market. Distinctly and uniformly early. Splendid for early market and shipment; valuable as an early kraut variety. Plants small, compact, allowing very close planting. Stem short; heads uniformly round; firm; 6 to 7 inches in diameter. Weight, 3½ to 4 lbs. Interior clear white and of excellent quality. Mature in 66 days. **1 oz. 75c.**

Early Jersey Wakefield. Extremely early variety, very valuable for home and market garden as well as for shipment. Plants very small and compact, allowing close planting; stem short. Heads firm and conical; usually 7 inches long, 5 inches thick near base; weight, 2 to 2½ lbs. **Pkt. 10c; 1 oz. 50c.**

Golden Acre. The earliest round-headed cabbage; especially valuable for early market and shipping. Plants very small and compact; stem short. Heads uniformly round; firm, commonly 6 inches in diameter and weigh 3 pounds. **Pkt. 10c; 1 oz. 75c.**

LATE VARIETIES

Mature in 90 to 100 days.

Danish Ball Head. This is the best late cabbage. The plants are medium sized with short stems. Heads large; flattened globe shape; becomes 8 to 9 inches across, 6 to 7 inches deep, and weigh 7 to 9 pounds. Very firm and solid; of excellent quality; keeps perfectly in storage until late spring. **Pkt. 10c; 1 oz. 75c.**

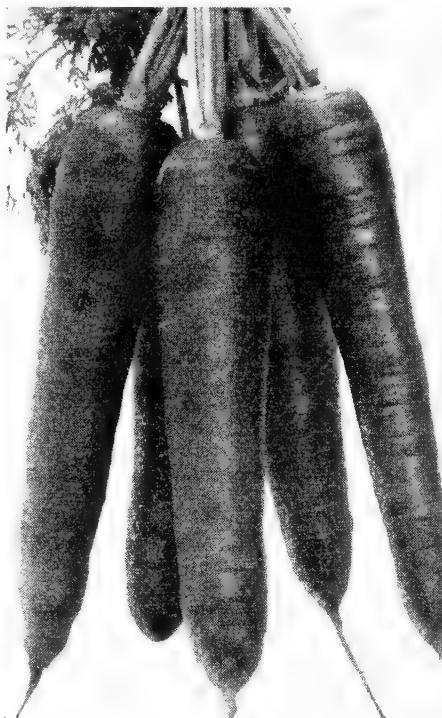
Late Flat Dutch. The best very large, late cabbage. Popular for home and market garden. A good keeper. Heads very large and flat, but deep; become 12 to 14 inches across, 7 inches deep, and weigh 12 to 14 lbs. or more; firm, good quality. **Pkt. 10c; 1 oz. 50c.**

Mammoth Red Rock. A sure cropper and used very extensively for pickling. The solid heads are borne on medium-length stems and are red throughout. Perfectly round, solid as a rock, and quite large. Often weighing 6 to 8 pounds each. The latest of the red cabbages. **1 qt. 10c; 1 oz. 50c.**

Savoy. Enjoys great popularity on account of its tasty flavor which is more delicate than that of ordinary cabbage. The large round heads are somewhat flattened and very heavy. The deep green, crinkled outer leaves enclose the tender, light green heart. It matures late in the fall and will keep all winter. **Pkt. 10c; 1 oz. 50c.**

CHINESE CABBAGE

Wong Bok. This exceptionally fine vegetable is rapidly growing in public favor. It resembles the Cos lettuce, forming long heads of crisp leaves. Very mild and pleasant flavored. Serve as a salad or cooked. **Pkt. 10c; 1 oz. 50c.**



Carrots, Imperator

CARROTS

½ oz. to 100 ft., 3 to 4 lbs. per acre.

Sow seed in light sandy soil, from April to July, in drills 1½ feet apart, covering the seed ½ inch deep. Thin out the young plants from 3 to 5 inches apart, according to size of variety. Cultivate freely and do not allow the soil to get too dry during hot weather. All varieties of carrots: **Pkt. 10c; 1 oz. 35c; ¼ lb. \$1.00.**

Chantenay, Oregon. Flesh is a deep golden orange color, always smooth and fine in texture, very tender. Excellent bunching variety and preferred by market growers. Medium early. 72 days.

Chantenay, Red Core. A fine carrot. Flesh tender and sweet, reddish orange in color with the core indistinct and of about the same color as the surrounding flesh. Suitable for canning and table use. 72 days.

Danvers Half Long. Red core. The roots are a rich dark orange and because of its symmetrical shape—long and pointed—it makes an excellent bunching variety. It has proved over a period of years to be the most popular carrot, both with the grower and the shipper. Mature in about 75 days.

Improved Imperator. This carrot grows to a length of 7-8 inches with a shoulder diameter of 1¼ to 1½ inches, making a smooth crown. Does not have undesirable side shoots; have a fine texture, and is good and sweet. Deep orange. In all respects it is very attractive for shipping purposes. 77 days.

Nantes Coreless. Excellent for forcing, as well as for home and market garden use. Tops very small. Roots bright orange, cylindrical, blunt tipped. Flesh reddish orange, crisp, tender and of very delicate flavor. Practically coreless. 68 days.

Stock Carrots

1 oz. 30c; ¼ lb. 90c.

Orange Belgian. A very productive variety, with roots measuring 20 inches long. They are broad at the shoulder, and gradually taper to a fine point. The skin below the ground is a light orange, but above the soil surface it is green. Will yield heavily, particularly on good deep soil.

White Belgian. A late variety, an excellent keeper and very productive. Principally grown as stock feed, since it will yield as much as 40 tons per acre. Roots are 7 to 8 inches long, 3 inches across at the top, tapered and pointed.

CAULIFLOWER

½ oz. to 100 ft., 4 oz. per acre.

The same methods that produce good cabbage will grow good cauliflower. The only great difference is that cauliflower heads must be protected from sunlight so as to make sure of the desirable white curd. Gather the tops of the leaves together loosely as soon as the heads begin to form. In shutting off the light, it is important not to cramp the heads. **Pkt. 25c.**

Danish Giant, Dry Weather. (65 days.) One of the most dependable in adverse, dry weather. Plants dwarf, short stemmed; larger than Early Snowball. Heads large, 6 to 7 inches across, commonly weigh 2 pounds. White with tinge of cream; of splendid quality.

Early Snowball. (52 days.) The best for greenhouse forcing, early market, and shipping. Plants very dwarf. Heads snow white, deep, smooth and compact; about 6 inches across, weighing about 1½ to 2 pounds. The standard of excellence in cauliflower.

CELERY

¼ oz. to 100 ft., 4 oz. per acre.

Sow from February to May in drills 1 foot apart. Later, usually in June, transplant to rows 3 feet apart, setting plants 6 inches apart in row. Rows should be furrowed out so plants may be set 6 inches below the garden level. Later, soil may be banked against rows for blanching, even so-called self-blanching varieties need the cool, moist soil to render the stalks crisp and tender, but this should not be done until a few weeks before harvesting. One ounce of seed will produce five thousand plants. **Pkt. 10c.**

Golden Self Blanching. Early and particularly desirable for home and market garden. Plants fairly tall and compact with firm stalks, 26 to 28 inches tall, which blanch readily and are of splendid quality.

Golden Utah. A light yellow-green selection of the original "Utah". Has superb quality and size of original, plus easier bleaching quality and more attractive sales appearance. Certainly an outstanding celery that merits your confidence.

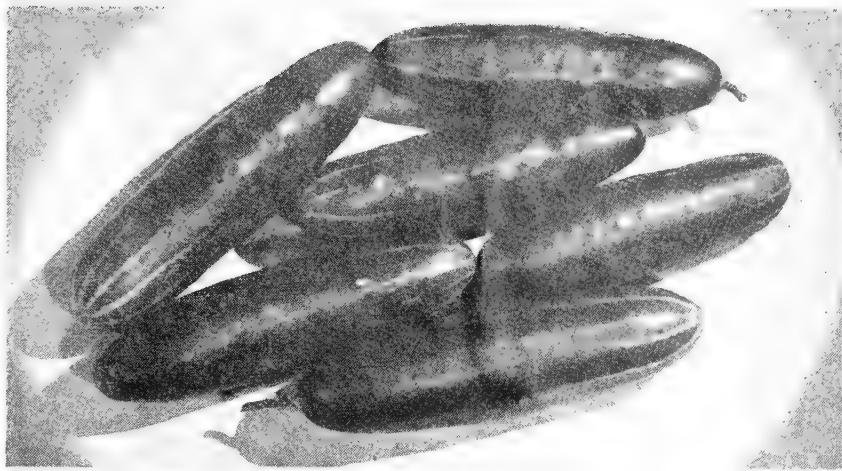
Utah Jumbo Winter. A remarkable late celery of the finest quality. Plant sturdy, compact and solid. Very free from strings. Light green in color; nutty flavor.

CELERIAC

¼ oz. to 100 ft., 4 oz. per acre.

Sow seed at the same season and give same treatment as common celery. Transplant to moist, rich soil, in rows 2 feet apart and 6 inches apart in row. Give thorough cultivation. It is not necessary to earth up or handle the plants. After the roots have attained a diameter of 2 inches, they are fit for use. Pkt. 10c.

Large Smooth Prague. An improved variety of turnip-rooted celery producing large tubers of nearly globular shape and comparatively smooth surface.



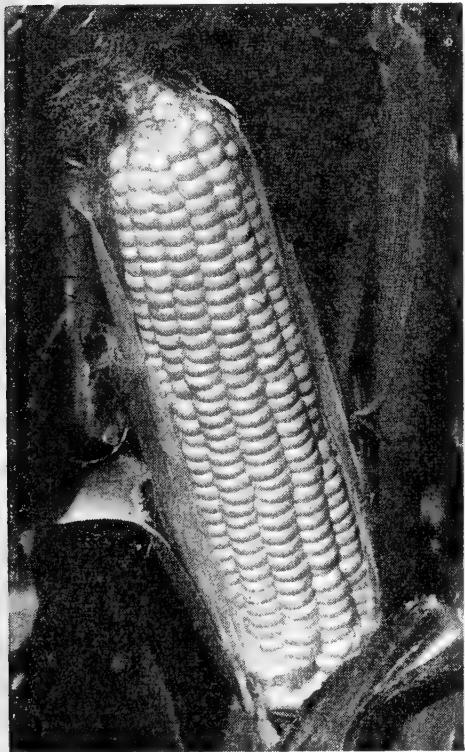
Cucumbers

CHICORY

1 oz. to 100 ft., 4 to 5 lbs. per acre.

Sow chicory when weather becomes warm and settled. Sow in rows at least 24 inches apart and thin to 3 inches between plants. Pkt. 10c.

Witloof or French Endive. One of the best and most attractive of salad vegetables. Seed sown in spring produces long, thick roots by November. To force for use, dig roots in fall and trim the leaves off an inch above the crown. Trench in a warm, dark place, covered with 6 or 8 inches of soil and a top layer of fresh manure. A handsome, compact cluster of blanched leaves resembling Endive result. They are tender and have a rich, mildly acrid flavor.



Corn, Marcross

EGGPLANT

¼ oz. to 100 ft., 5 to 6 oz. per acre.

Sow in mild heat, about the middle of March, and transplant on June 1, setting the plants 2½ feet apart. Pkt. 10c; oz. 65c.

Black Beauty. (80 days.) The fruits of this variety are large and symmetrical. Retains its glossy black-purple coloring for a long time. This lasting quality makes it distinctly popular.

Sweet corn, 8 oz. to 100 ft., 10 to 14 lbs. per acre.

Plant in rich, warm soil, in hills, 2 to 3 feet apart, in rows 3 feet apart for early kinds and 4 feet apart for late sorts. Make first sowing about the middle of May and continue fortnightly up to about the middle of July. Corn should be planted in blocks of at least 4 rows.

Hybrid

Pkt. 10c; ½ lb. 35c; 1 lb. 60c.

Unless otherwise noted.

Listed in order of ripening.

Spancross. (73 days.) Very early. Well filled 6-inch ears of a medium yellow. Good quality. Plants grow 4 to 5 ft. tall. **Marcross.** (76 days.) Stalks short but sturdy, highly resistant to bacterial wilt. Ears long, plump, abruptly tapered at tips; 10-14 rowed, with light cream-yellow medium-broad kernels of good quality. ½ lb. 30c; 1 lb. 50c.

Carmelcross. 79 days. Large, 8-inch ears, well filled with medium-yellow kernels. Good flavor and quality. Early. Plants 4½ to 5 ft. high.

Golden Cross Bantam. (88 days.) Very uniform in habit of growth, size, and maturity. The ears measure 8 inches long and they are closely set with 14 rows of light yellow grains filled with delicious sweet pulp. Bears two ears per plant. Pkt. 10c; ½ lb. 35c; 1 lb. 50c.

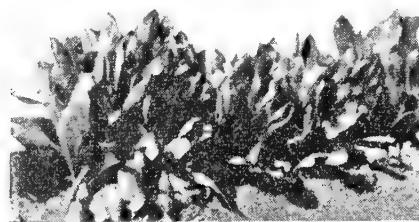
Open — Pollinated — Yellow

Pkt. 10c; ½ lb. 20c; 1 lb. 35c.

Golden Bantam. 8-row. (79 days.) Slender ears 5½ to 6½ inches long have 8 rows of even golden kernels of good flavor. Very sweet. Popular with the home gardener and for commercial purposes.

Golden Bantam Improved. (81 days.) A selection from the original strain of Golden Bantam. Larger ears, more rows of kernels, greater production. Golden yellow, deep, wide, tender kernels with a fine sweet flavor. Particularly desirable for canners and market gardeners. Remains in table condition a long time.

Golden Early Market. (77 days.) One of the best extra early yellow varieties for home and market garden. Ears have strong husks and 8 to 12 beautiful tender rows to each ear. Kernels golden yellow, medium, sweet and of good flavor.



Chicory

CORN

CUCUMBER

1 oz. to 100 ft., 3 to 4 lbs. per acre.

Mature in approximately 60 days.

Sow outdoor varieties early in spring, in hotbeds, and transplant to open ground when weather is suitable. For later crop, sow seed when weather becomes settled, in hills of 5 to 6 inches apart. They require a warm, rich soil, and should be watered liberally. Pkt. 10c; 1 oz. 35c; ¼ lb. \$1.00.

Boston or Chicago Pickling. (59 days.) An early pickling or slicing variety. Fruits weigh about 1½ pounds and are 6 inches long and 2½ inches in diameter.

Cubit. All-America Bronze Medal, 1944. Handsome, long, cylindrical fruits of dark green exterior, with crisp, white flesh and small seed area. Excellent for home and shipping. Pkt. 25c.

Davis Perfect. (68 days.) A splendid dark green variety, excellent for slicing and a good shipper. Very dark green, white spined. The color is retained a long time when pickled. Tapered somewhat at both ends. Seeds few.

Improved Long Green. (67 days.) This is a great improvement over the old strain of Long Green. The fruits are unusually handsome, being of good form and of a deep green color which is retained a considerable time after picking. 9 to 10 inches.

Lemon. (65 days.) Little cucumbers resembling lemons in both form and color and have a delicious and distinctive flavor. Fine for preserves or sweet pickles and considered superb as a salad. Prolific.

National Pickling. (56 days.) A highly desirable pickling strain. Fruits weigh 1½ pounds; are dark green, symmetrical with thick walls; full ended. Slightly shorter than Chicago Pickling.

Straight 8 (66 days.) An outstanding new variety producing symmetrical, cylindrical fruits about 8 inches long and 1½ inches in diameter. Fruits are well rounded at the ends and when ripe are deep green and free from objectionable striping or tipping. Ideal for home or market gardens.

Gherkin or Burs. Of superior quality for pickles. Not a true cucumber. Very prolific: fruits are ready for pickling in about 60 days. Fruits pale green; prickly over entire surface. 1½ to 2 inches long; oval; uniform; seeds numerous and small.



CONTROLS MOLES AND OTHER BURROWING ANIMALS

Safe, easy-to-use product for effective eradication of lawn, garden and field pests. Simple directions on label explain quick method of treatment. 100% active ingredients create swift-acting gases.



24-oz. can 6-lb. can
60¢ \$1.70

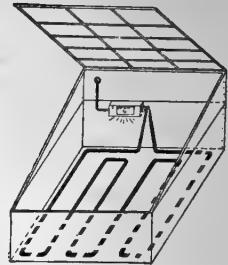
ZEHRUNG CHEMICAL CO.
Portland 9, Oregon

"GRO-QUICK" ELECTRIC SEED BED HEATER

Be a month ahead of neighboring gardens

BOTTOM HEAT CAN'T BE BEAT FOR FAST SURE RESULTS

"ROOT CUTTINGS IN 6 DAYS"
"SEED UP IN 30 HOURS"
"CUT GERMINATION TIME BY 2/3"
"TRANSPLANT 2 WEEKS SOONER"



These enthusiastic reports from users tell what GRO-QUICK SOIL HEATING CABLE will do for you. Ideal for hotbeds, cold frames, unheated greenhouses, plant benches. For early plant starting in open ground. Operates from household current. Prepaid with full instructions at prices shown.

JUNIOR 40' Cable, 200 watt with thermostat for 3x6 bed or 20 sq. ft.	\$5.35
SENIOR 80' Cable, 400 watt with thermostat for 6x6 bed or 40 sq. ft.	\$6.95



25c pkt. makes 5 gal.
\$1 pkg. makes 25 gal.

REG. U. S. PAT. OFF.
This plant hormone spray will help develop a better set and a bigger crop of tomatoes. If the spray hits the blossoms after blooming and before pollination, the tomatoes will be seedless. Simple and easy to use, Fruitone also helps grow big berries on berry-bearing shrubs and stops pre-harvest drop on fruit trees.

Miller's GARDEN COMPOST MAKER

5 lbs.	25 lbs.
80c	\$2.50

★ CONVERTS RUBBISH INTO FERTILIZER
★ USES GRASS CLIPPINGS, LEAVES, WEEDS, ETC.

A 5-lb. package of Miller's Garden Compost Maker will make several hundred pounds of high-grade, organic humus fertilizer by converting your garden refuse into a rich organic humus compost.



RODUSTO A complete Insecticide - Fungicide, spray or dust. Contains Rotenone, Pyrethrum, Sulphur, Copper, etc. Controls most of the common insect pests and fungus diseases of the garden.

1 lb., 90c — 5 lbs., \$3.00, plus postage

ROTEMOL Insecticide. Liquid Rotenone - Pyrethrum spray. Controls hard to kill insects — Gladiolus Thrips, Red Spiders, Aphis.

1 oz., 35c — 4 oz., \$1.00, plus postage

CALOMAG Controls Cabbage Maggots. One teaspoon around base of seedling cabbage or cauliflower when transplanted to garden.

10 oz., 50c — 20 oz., 80c, plus postage

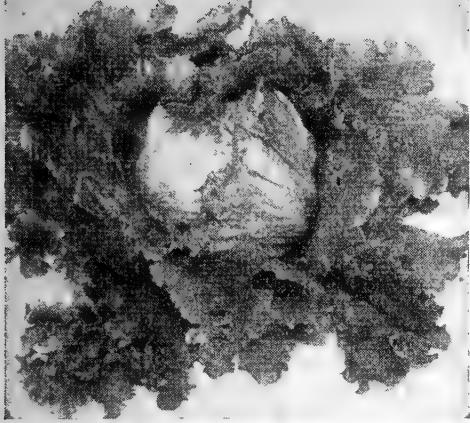
SPRADUSTO 5% DDT - Fermocide-Sulphur-Rotenone-Pyrethrum. Spray or dust. A complete DDT Garden Insecticide-Fungicide.

1 lb., \$1.00 — 5 lbs., \$4.25, plus postage

BOOSTER POWDER Stimulates Plant Growth, Root Formation, Fruit Setting, Flower Production. Produces vegetables rich in flavor and minerals. Contains Nitrogen, Phosphorus, Potash, Calcium, Sulphur, Iron, Magnesium, Manganese, Zinc, Boron, Copper and Iodine. Add 1 tablespoon Miller's Garden BOOSTER Powder to 1 gallon water. Mix thoroughly.

1 lb., 50c — 5 lbs., \$1.50, plus postage

Write for FREE GARDEN BOOKLET
Describing and Illustrating Insects and Fungous Diseases



Great Lakes Lettuce

ENDIVE

1 oz. to 100 ft., 4 to 5 lbs. per acre.

Sow about the middle of April, in rows 1½ feet apart, and thin out to about 9 inches apart. Pkt. 10c; 1 oz. 30c.

Broad-leaved (Escarolle). Leaves long, broad, and succulent. Fine for winter salads and cooking.

Large Green Curled (Pink Ribbed). Outer leaves bright green, midribs tinged with rose. Center leaves blanch readily. Makes attractive salads. Vigorous and resistant.

KALE, Borecole

1 oz. to 100 ft., 4 to 5 lbs. per acre.

The culture is practically the same as that of late cabbage, but as the plants will withstand several degrees of frost, they can grow late into the fall. Many think kale best after the first heavy frost. Pkt. 10c; 1 oz. 20c; ¼ lb. 60c.

Dwarf Green Curled Scotch. (55 days.) Plants have wide-spreading, finely curled blue green plume-like leaves. Relished as a vegetable green and useful as an ornament.

Tall Green Curled Scotch. (60 days.) Hardy plants with leaves deeply cut. Curled at the edges, light green in color; very tender and finely flavored after touched with frost.

Jersey or Thousand Headed. Called Chicken or Cow Kale. Vigorous branching plants with enormous cabbage-like leaves. Relished by poultry and livestock as winter greens.

KOHL RABI

½ oz. to 100 ft., 4 to 5 lbs. per acre.

The delicious flavor of this turnip-shaped bulb combines both cabbage and turnip. As early in spring as possible, sow the seed in light rich soil in rows 1½ feet apart. When plants are well established, thin to 6 inches apart in the row. Pkt. 10c; 1 oz. 50c.

Early White Vienna. (55 days.) For forcing. The best table sort if used when the bulbs are 2 inches in diameter. It matures very early and produces medium sized light green bulbs with white flesh of excellent quality.

LEEK

Large American Flag. An early popular sort. Stems 8-10 inches long, 1½ inches thick; white, and attractive. Leaves large, medium green, drooping backward. Pkt. 10c; oz. \$1.00.

LETTUCE

½ oz. to 100 ft., 3 lbs. per acre.

Sow the seed in hotbeds during February until the middle of March, afterward transplanting into flats or coldframes, leaving about 6 to 8 inches between the plants. As soon as weather becomes suitable, transfer to open ground and set out in rows 1 foot apart, leaving 9 inches between the plants in the rows.

Pkt. 10c; 1 oz. 40c; ¼ lb. \$1.20.

Bibb Lettuce. (57 days.) Rather small heads used as forcing lettuce in the south. Leaves are smooth, dark green, heart butter yellow. Excellent quality.

Great Lakes (83 days.) A heading variety of the Imperial type developed by U. S. Department of Agriculture and Michigan Experiment Station. Leaves large and well folded; ribs heavy. Shows considerable resistance to tipburn and ability to head under adverse conditions. Pkt. 25c.

Improved Hanson. (82 days.) A very hardy lettuce, excellent for a summer crop as it withstands heat. Forms a large, light green head which is very hard. An excellent variety for the home gardener for it is very sweet, crisp and tender.

Imperial No. 152. (Mature in 83 days.) Medium large, solid and attractive heads. Well adapted for early fall planting and dependable in heading. Resistant to brown blight.

New York No. 515 Improved. A development from Number 12, matures slightly earlier. Resistance to tip-burn makes this lettuce ideal where hot weather prevails.

Red Leafed Mignonette. 80 days. These small crisp heads of early lettuce have curled outer leaves of medium green tinged with reddish-brown. They are compact with a blanch light creamy-yellow color throughout.

LEAF LETTUCE

Pkt. 10c; 1 oz. 30c; ¼ lb. 75c.

Black Seeded Simpson. (45 days.) A good non-heading or cutting lettuce with broad, light green, frilled outer leaves. Center leaves are almost white. Crisp leaves with a delicate flavor.

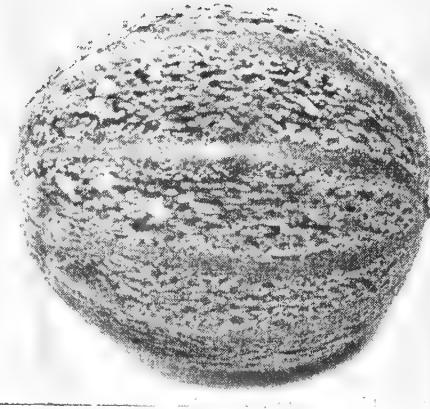
Grand Rapids. Very early. Hardy, disease resistant. The most widely used and best adapted variety for greenhouse forcing. Plants large, upright, compact, and handsome; bright solid, light green, large leaves with broad, much frilled margin. Very tender and sweet when grown under glass.

Oak Leaf. Shaped like an oak leaf. Stands up well in hot weather and does not turn bitter. Pkt. 15c.

Red Leaf Prize. An early non-heading sort, very desirable for home garden use. Plants of medium size, crisp and tender; color medium green with brownish-red edges on outer leaves.



Oak Leaf Lettuce



Muskmelon, Rocky Ford

MUSKMELON

1 oz. to 100 ft., 3 to 4 lbs. per acre.

In sections where the summers are short, seed can be planted indoors or in hot beds in small boxes. The young plants can be transferred to the garden when danger of frost is past. If practicable, spade in a liberal forkful of well-rotted manure at the bottom of each hill. The rows should be at least 6 feet apart and the hills 3 feet apart in the rows. In general, the culture is the same as that for cucumber. Pkt. 10c; 1 oz. 25c.

Cranshaw. (96 days.) A thick-fleshed melon with salmon color inside, golden green outside. Round at base, stem end pointed. Weighs 7 to 8 pounds.

Hale's Best Improved No. 36. (80 days.) Fruits slightly oval, weight 3 to 4 pounds. Flesh exceptionally thick, deep salmon in color, sweet, aromatic and of very fine quality. Uniform in shape.

Hale's Best, Jumbo Strain. An outstanding shipping variety. Fruits slightly oval, uniform. Flesh exceptionally thick, deep salmon in color; sweet, and of very fine quality. Has a delightful aroma. Ripe in 75-80 days.

Hearts of Gold. (100 days.) This popular medium sized melon follows the earlier varieties. It is fine to plant for succession as it ripens in about 100 days. The fruits are 5 to 6 inches in diameter. The smooth orange salmon flesh is exceptionally thick and fine flavored.

Imperial No. 45. (87 days.) Extensively used because of resistance to downy mildew. Similar to Hale's Best but only faintly ribbed. An exceptionally good shipper. 10c; 1 oz. 20c.

Rocky Ford or Netted Gem. (92 days.) Fruits are small with rather large seed cavity, nearly round; no ribs, and heavily covered with hard gray netting. Flesh thick, green in color with gold tinge at the center. Juicy, spicy, and of good quality.

OTHER MELONS

Casaba. (110 days.) The casaba is a melon for the late season after the muskmelons are past. Fruits are medium, large, globe shaped, weigh 6 pounds; outer color golden yellow, surface wrinkled. Flesh white, luscious and spicy.

Honey Dew. (112 days.) A very fine melon. Fruits large globular, weigh 5 to 7 pounds. Surface is smooth, hard, with practically no netting, creamy white. Flesh light emerald green, thick, ripening to the rind; juicy and tender, with a distinct sweetness not found in other melons.

Persian. (115 days.) A late, slow growing variety. Fruits globular; rind very dark green, netting fine but sparse. Flesh thick, orange-pink in color. Of a distinct and delicious flavor.

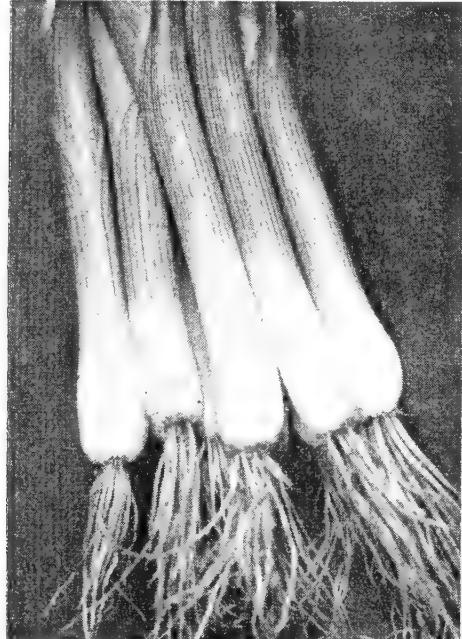
MUSTARD

½ oz. to 100 ft., 4 lbs. per acre.

Seed may be sown from early spring to midsunimer in rows 18 inches apart. Thin to 5 or 6 inches apart in the rows. The plants are in condition for use as soon as the leaves are the size of one's hand. Mustard runs to seed quickly, so that successive plantings are necessary for a continuous supply. Pkt. 10c; 1 oz. 20c.

Southern Giant Curled. The leaves are large, light green with a tinge of yellow, and much crumpled and frilled at the edges. The plant is upright or slightly spreading in growth. This variety is valued in the South for its vigor, hardiness, and good quality.

Mustard Spinach or Tendergreen. Strictly speaking it is not a variety of mustard. A quick growing plant from the Orient. Leaves oblong, broad, fairly smooth with light green center ribs. Slow to seed, resistant to heat and drought. The flavor combines that of spinach and mustard.



Bunching Onion

OKRA or GUMBO

2 oz. to 100 ft., 8 to 10 lbs. per acre.

Sow seed early in May, in rows 3 feet apart and 2 inches deep. As plants appear, thin out to about 1 foot apart. Pkt. 10c.

Improved Dwarf Green. Early. Short, thick pods.

Perkin's Mammoth Long Pod. Standard medium early sort for home, market garden and canning. Plants 4 to 5 feet tall; pods dark green, fleshy, tender; become 7 to 8 inches long, 1½ inches in diameter. Distinctly ribbed and tapered.

PARSLEY

½ oz. to 100 ft., 3 to 4 lbs. per acre.

Parsley seed is even slower than parsnip in germinating. It grows best in rich mellow soil and should be sown as early as possible in spring in rows 1 to 2 feet apart with a covering of not more than ½ inch of soil firmly pressed down. When the plants are well up, thin them 8 to 12 inches apart in the row. Pkt. 10c; 1 oz. 20c.

Extra Triple Curled (Moss Curled). This vigorous compact grower is one of the most popular varieties because of its deep green color and tightly curled leaves that look like moss. It is unusually decorative for table use.

PARSNIP

1 oz. to 100 ft., 3 to 4 lbs. per acre.

Sow the seed as soon as season will permit, in drills about 2 feet apart, and thin plants out to 1 foot apart in the row. The ground should be deeply trenched and well manured. Pkt. 10c; 1 oz. 25c.

Harris Model. An especially smooth parsnip free from side roots with a very attractive whitish color. Roots about 12 inches long with a well proportioned shoulder uniformly tapered to the tip. Very tender and good flavor.

Hollow Crown, Thick Shoulder. This is the best and most popular variety in cultivation. The skin is smooth and white, while the flesh is tender. The roots grow 18 to 20 inches in length, but the first 8 inches from the top is the best part.

ONIONS

½ oz. to 100 ft., 3 to 4 lbs. per acre.

As early as soil can be worked in spring, sow the seeds thinly in drills 1 foot apart, and cover lightly, later thinning out to about 6 inches apart in the row. The soil must be well fertilized and be made very friable. In hot weather, water frequently. Pkt. 10c; 1 oz. \$1.00

Crystal Wax Bermuda. Medium size, pure, waxy white. One of mildest sorts grown.

Utah Sweet Spanish. A large, globe shaped brown onion, weighing 1 to 3 pounds. Small tops. Flesh mild and sweet. Good for slicing. Most popular marketing onion.

White Portugal, or Silverskin. A good second early white flat onion. It should be planted any time from November 1st until April 1st. It is a good keeper and desired for shipping. Also very excellent as green bunching onions. Under good cultivation the average diameter is from 4 to 6 inches.

White Bunching or Pickling. Excellent and one of the best for green onions. Crisp and mild, attaining a good size before bulbs form.

White Sweet Spanish. (112 days.) A very large onion with pure white flesh, similar to the Yellow Sweet Spanish. A good keeper. Globular with small neck.

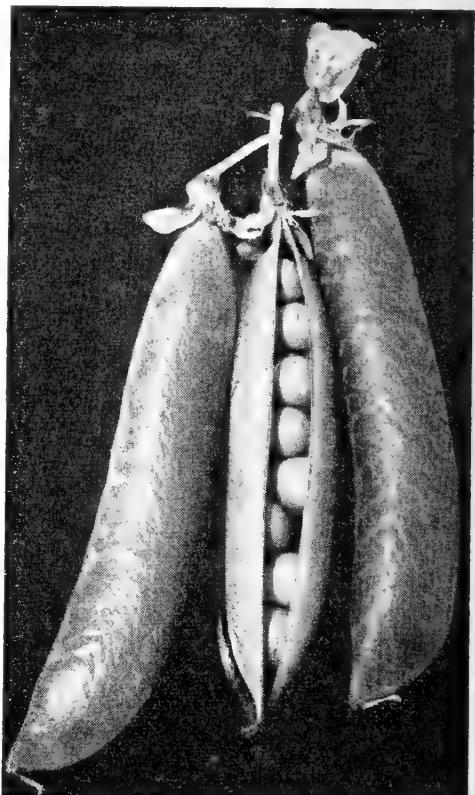
Yellow Globe Danvers. An outstanding variety. Dependable, medium late, hardy, and excellent keeper; used for shipping and storage. Bulbs medium size, spherical, clear yellow, firm and solid with tough, clinging skins. Flesh white with slight yellow tone. Pkt. 10c; 1 oz. 75c.

ONION SETS

Sets are northern grown, hardy, carefully cleaned, graded and packed. Produced for western conditions. Plant onion sets deep for green onions and shallow for dry onions. 1 lb. to 50 ft.

PEAS

1½ lbs. to 100 ft., 90 to 180 lbs. per acre.



For first crop, round-seeded peas should be sown in the open ground as soon as it is fit to be worked; wrinkled varieties should be planted 2 to 3 weeks later. Frequent planting for succession, and a careful selection of varieties, will give an almost continuous crop of peas from June until frost. Sow peas in rows 3 feet apart and 1 to 2 inches deep. Rotted horse manure and wood ashes should be freely used in the preparation of soil for growing peas. Pkt. 10c; ½ lb. 20c; 1 lb. 35c.

FIRST EARLY VARIETIES

Alaska. (55 days.) This variety is extremely early. The round pods, 2½ inches long, contain 5 to 8 peas which are ready for use in about 55 days. The peas are small, round, and tender. The vines are 2½ to 3 feet tall.

Gradus. (55 to 62 days.) A very popular second early, large podded variety for home use and market. Vines 36 inches tall, medium green, stocky. Pods single, broad plump, pointed, medium green; contain 8 to 10 large, delicious peas.



Parsnips

Laxton's Progress. (60 days.) A little earlier than other dwarf large podded peas, this variety is generally considered the best of its class. The blue green pods are often more than 4 inches long and contain 8 dark green peas of finest quality. The seeds are large, wrinkled green and cream.

Little Marvel. (64 days.) Outstanding among dwarf peas for the exceptional quality and yield. Valuable for home garden and early market. Vines dark green, 18 inches tall, stocky. Pods single and double, dark green, blunt, plump, well filled with 7 to 8 tender peas.

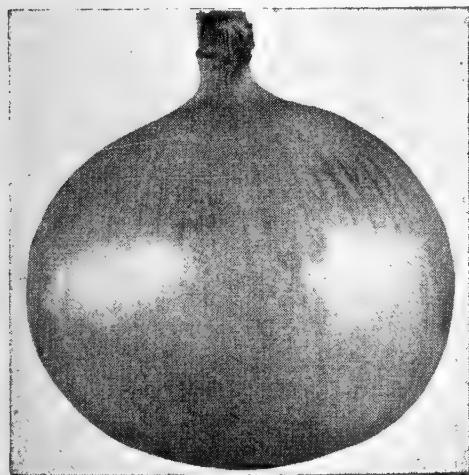
MAIN CROP

Mature to pick in about 75 days.

Improved Stratagem. A superior late variety. Vines deep green, 26 inches tall, stocky and branching. Pods single and paired, wide, nearly round, straight, pointed, dark green. Contain 8 to 10 tender peas.

Tall Telephone or Alderman. A handsome, large podded variety. Unexcelled for home gardens, for local markets and for shipping. Bears immense crops. Wilt resistant. Pods single, very broad, plump, straight, dark green, pointed, contain 8 to 10 peas of highest quality.

Dwarf Telephone. Only about 2 feet tall, otherwise resembling Alderman. The pods are well filled with peas of the same good quality. It is an excellent variety to follow the early peas in the home garden. Seeds large, green, wrinkled.



Sweet Spanish

PEPPER

1/4 oz. to 100 ft., 1 to 2 lbs. per acre.

Culture, soil and temperature requirements are about the same as for eggplant. A moderate dressing of Guano, poultry manure, or complete commercial fertilizer, hoed into the soil after the plants are 6 to 8 inches tall, will be very beneficial. Pkt. 10c; 1 oz. 75c.

California Wonder. Thickness of flesh alone, which is often $\frac{3}{8}$ of an inch, places this sweet pepper above all others. It is crisp and juicy, too, without a trace of pungency. Vigorous growing plants bear a heavy yield of blocky fruits that become as much as 5 inches long and 4 inches wide.

Chinese Giant. Fruits are often 6 inches across and 4 $\frac{1}{2}$ to 5 inches deep. The flesh is moderately thick and very mild. Rich bright green when young, and bright cherry red at maturity.

Large Bell or Bullnose. A popular, early, sweet prolific sort. Small, erect plants. Fruits blunt; flesh of fine quality and mild flavor. Much used for stuffing.

Long Red Cayenne. This well known, medium early pepper is especially good for drying purposes. The fruit is 4 inches long and 1 inch thick, twisted and pointed. It is deep green when young and bright red when ripe. The flesh is strong and pungent.

Perfection Pimento. A splendid canning variety, adapted to home and market garden culture. Plants large, erect, prolific. Fruits heart shaped, very smooth; flesh exceptionally thick, sweet and mild.

Worldbeater. 73 days. Large 5 by 3 inch fruits, three and four lobed, have a thick flesh and a mild, sweet flavor. A good keeper, it is dark green turning dull red when ripe. Uniform dwarf plants are 19 inches tall.

PUMPKIN

4 oz. to 100 ft., 3 to 4 lbs. per acre.

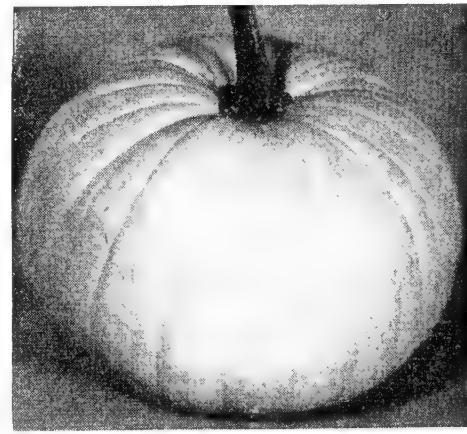
Pumpkins are typically American, and pumpkin pie is one of our truly American dishes. They are less sensitive to unfavorable conditions of soil and weather than melons or cucumbers, but they are cultivated in about the same way. Pkt. 10c; 1 oz. 25c.

Kentucky Field or Dickenson. Fruits very large, flattened, furrowed. Skin creamy buff; flesh extremely thick, deep salmon-yellow and of good quality. Dependably early and heavily productive. Good for canning. Squash bug resistant.

Large Yellow or Connecticut Field. This sort is grown largely in the corn field for stock, but the flesh is moderately fine grained, highly flavored, and very good for pies. The fruits weigh about 20 pounds and are a rich, deep orange yellow.

Sugar or New England Pie. The earliest and best variety for pies. Fruits commonly 6 inches long and 8 to 9 inches in diameter; flattened, furrowed. Skin smooth, of a rich, reddish-orange color; rind hard. Flesh is thick and orange-yellow.

Winter Luxury. This variety is very popular for the home garden. The fruit matures in 75 to 80 days, weighs 8 $\frac{1}{2}$ pounds, and is nearly round. The skin is light yellow with a russet tinge and finely netted; the flesh is rich creamy yellow, very thick, sweet, and finely flavored.



Pumpkin

QUANTITY OF SEED AND SPACING FOR HOME AND MARKET GARDENS

VEGETABLE	Seed Required for 50 ft. of row	Seed Required to sow an acre	Distance between rows	Distance apart of rows in row planting inches	Depth inches	VEGETABLE	Seed Required for 50 ft. of row	Seed Required to sow an acre	Distance between rows	Distance apart of rows in row planting inches	Depth inches
Artichoke, Globe	1/4 oz.	6 to 8 oz.	40 to 48	18 to 24	1	Kohl Rabi	1/4 oz.	4 to 5 lbs.	14 to 24	4 to 6	1/2
Asparagus	1/2 oz.	4 lbs.	14 to 24	3 to 6	1	Leek	1/4 oz.	4 lbs.	14 to 36	2 to 3	3/4
Beans, Bush	1/2 lb.	50 to 60 lbs.	24 to 30	2 to 3	1 1/2 to 2	Lettuce	1/4 oz.	3 lbs.	12 to 18	4 to 12	1/4
Beans, Lima	1/2 lb.	30 to 50 lbs.	24 to 36	3 to 6	1 1/2 to 2	Melon, Musk	1/2 oz.	3 to 4 lbs.	70 to 80	36 to 60	3/4
Beans, Pole	1/2 lb.	30 to 35 lbs.	36 to 48	6 to 8	1 1/2 to 2	Melon, Water	1/2 oz.	3 to 4 lbs.	72 to 96	72 to 96	3/4
Beet	1/2 oz.	8 to 14 lbs.	14 to 24	3 to 4	1/2 to 1	Mustard	1/4 oz.	4 lbs.	14 to 24	6 to 9	1/2
Beet, Mangel & Sugar	1/2 oz.	6 to 10 lbs.	18 to 24	6 to 9	1/2 to 1	Okra	1 oz.	8 to 10 lbs.	24 to 40	18 to 24	1
Swiss Chard	1/2 oz.	6 to 10 lbs.	18 to 24	10 to 12	1	Onion	1/4 oz.	3 to 4 lbs.	18 to 24	3 to 4	3/4
Broccoli	1/4 oz.	4 oz.	20 to 36	16 to 22	1/2 to 1	Onion (for sets)		60 to 85 lbs.	12 to 14	Not thin'd	3/4
Brussels Sprouts	1/4 oz.	4 oz.	20 to 36	16 to 22	1/2 to 3/4	Parsnip	1/2 oz.	3 to 4 lbs.	18 to 24	3 to 4	1/2
Cabbage	1/4 oz.	4 oz.	18 to 36	14 to 24	1/2	Parsley	1/4 oz.	3 to 4 lbs.	12 to 20	6 to 8	1/2
Cardoon	1/2 oz.	5 oz.	20 to 32	20 to 30	1/2 to 1	Peas	3/4 lb.	90 to 180 lbs.	24 to 36	1 to 2	1 to 2
Carrot	1/4 oz.	3 to 4 lbs.	16 to 24	1 to 3	1/2	Pepper	1/4 oz.	1 to 2 lbs.	20 to 30	18 to 29	1/2
Cauliflower	1/4 oz.	4 oz.	24 to 30	20 to 24	1/2	Potatoes	8 lbs.	800-1000	24 to 36	18 to 24	1
Celery	1/8 oz.	4 oz.	24 to 30	4 to 6	1/4	Pumpkin	2 oz.	3 to 4 lbs.	96 to 110	60 to 84	3/4
Chicory	1/2 oz.	4 to 5 lbs.	20 to 36	2 to 3	1/2 to 1	Radish	1/2 oz.	10 to 12 lbs.	12 to 18	1 to 2	1/2
Collard	1/4 oz.	5 oz.	24 to 30	14 to 18	1/2	Rhubarb	1/2 oz.	3 lbs.	24 to 42	20 to 24	3/4
Corn, Pop	3 oz.	6 to 8 lbs.	34 to 40	6 to 8	1	Rutabaga	1/2 oz.	2 to 4 lbs.	18 to 24	4 to 7	1/2
Corn, Sweet	4 oz.	10 to 12 lbs.	30 to 42	9 to 12	1	Sage	1/2 oz.	4 to 5 lbs.	20 to 24	6 to 10	1/2
Corn Salad	2 oz.	10 to 12 lbs.	14 to 18	3 to 4	3/4	Salsify	3/4 oz.	7 to 8 lbs.	18 to 24	2 to 3	3/4
Cress	1 oz.	10 lbs.	12 to 18	2 to 4	1/2	Sorrel	1/2 oz.	4 to 5 lbs.	18 to 22	2 to 3	1/2
Cucumber	1/2 oz.	3 to 4 lbs.	48 to 60	12 to 36	1/2 to 3/4	Spinach	3/4 oz.	10 to 20 lbs.	14 to 18	3 to 5	3/4
Dandelion	1/4 oz.	5 to 6 lbs.	18 to 22	6 to 10	1/2	Squash, Bush	1 oz.	4 to 6 lbs.	42 to 48	42 to 48	1
Dill	1/2 oz.	5 lbs.	20 to 36	4 to 6	1/2	Squash, Vining	1 oz.	4 lbs.	72 to 90	60 to 90	1
Egg Plant	1/8 oz.	5 to 6 oz.	24 to 36	18 to 24	1/2	Sunflower	1 oz.	7 to 8 lbs.	48 to 70	10 to 12	1
Endive	1/2 oz.	4 to 5 lbs.	18 to 24	8 to 12	1/2	Tomato			2 oz.	40 to 60	36 to 40
Fennel	1/2 oz.	3 to 4 lbs.	24 to 32	5 to 8	3/4	Tobacco			2 oz.	36 to 48	24 to 36
Kale	1/2 oz.	4 to 5 lbs.	24 to 32	14 to 22	1/2	Turnip	1/2 oz.	2 to 3 lbs.	12 to 20	2 to 4	1/2

5 Hayes Products for Greener Pest-Free Gardens!

GARDEN HOSE SPRAY GUNS

THE Hayes Jr.

The All-Purpose Spray Gun

Full 3 GALLON capacity sprayer, yet easily held in one hand. Replaces heavy expensive spraying equipment. Just attach the Hayes Jr. to your garden hose, press the lever and SPRAY! Sprays up, down, sideways. For spraying vegetable and flower gardens, trees, etc., with liquid or powder insecticides.



ONLY \$6.95

THE Hayes-Ette

Ideal Weed Killer Gun (2-4-D)

1½ GALLON sprayer for small gardens, etc. Ideal sprayer to apply the new 2-4-D weed killer solutions. Weighs only a little over a pound filled. Nozzle adjusts to spray up, down, sideways—with all liquid spray materials free from soap.

\$3.45 ONLY

GARDEN SPECIALTY ITEMS

THE Hayes HAND

Revolutionary Hand Sprayer

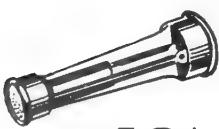
1 quart capacity. For home, farm and garden use. Sprays all liquid insecticides and properly strained powders such as Bordeaux, Lime Sulphur and Lead Arsenate. Ideal for applying the new DDT in and around chicken houses, rabbit hutches, and dairy barns.



ONLY
\$2.95

THE Hayes Sprinkl-Air

Amazing New AIR-Water Nozzle!



ONLY 69¢

Mixes AIR into the water flowing through garden hose! Magically changes harsh spray into soft, lacy, beneficial RAIN that falls lightly onto newly seeded lawns and gardens. Protects tender seedlings and tiny plants—won't wash away seeds or earth.

THE IDEAL MATE FOR...

THE Hayes 10 to 1 Proportioner

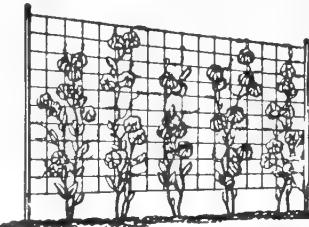
The new Liquid Fertilizers give rapid results in greener, more beautiful lawns. Apply them the "easy way"—through the garden hose while sprinkling, with the Hayes 10-1 proportioner.

ONLY
\$1.95



COMB. PKG.—NOZZLE & PROPORTIONER \$2.55

Weatherized TRELLIS NETTING



Ideal Support for SWEET PEAS, GAR-DEN PEAS, POLE BEANS, CUCUM-BERS, TOMATOES. Grows finer, larger flowers and vegetables. Hung with ease in 5 minutes; no fuss or bother. Use instead of string or wire. (Wire in sun burns delicate tendrils.) Doesn't rot like string—last several seasons. In 3 sizes: No. 1, 60x72 in., 65c; No. 2, 60x96 in., 85c; No. 3, 60x180 in., \$1.25. Postpaid.

TRAIN-ETTS

New Handy Plant Tie *Twist of the Wrist Gives Permanent Support*

Say "goodbye" to unsightly twine and raffia to needless work with shears. TWIST-EMS—strong dark-green invisible tapes with wire reinforcing—protect stems, permanently support annuals, perennials, vines, shrubs and vegetab'es. Grand for flower arrangement. Millions used by successful nurserymen, professional and amateur gardeners. Box of 125, 8-inch size. 25c.



"TWIST-EMS"

Do as successful market growers do—Place patented Germaco HOTKAPS—strong little hothouses—over seeds (or over plants when transplanting). Completely protect from destructive frosts, storms, insects—maintain perfect mulch. Increase yield from 18% to 51%, ripen plants three weeks earlier.

Quick, easy to set, instructions on package. 25 Hotkaps, 60c. 250 for \$4.15. Setter free. Beat everyone with first vegetables, flowers. Buy Germaco HOTKAPS from us today. MARKET GROWERS: GERMACO HOTKAPS help you have sure crops, highest out-of-season prices, bigger profits. 1000 for \$12.00.

Send for FREE FOLDER



**How Hotkaps help you grow
Earlier, Hardier Vegetables, Flowers**



WEEDONE

REG. U. S. PAT. OFF.

Kills Poison Ivy, Poison Oak, Bind-weed, Honeysuckle, Dandelion, Plantain, other noxious weeds. Sprayed on leaves, it travels down and kills right out to the root tips. Sprayed on lawns, it kills lawn weeds without hurting the grass. Safe for humans and animals. Weedone does not hurt the soil or spraying equipment. Just mix with water and spray.

The Sensational Internal Weed Killer

6-oz. can 75c
(covers 1,000 sq. ft.)

1-qt. can \$2.50
(covers 5,000 sq. ft.)

1-gal. can \$8.00
(covers 1/2 acre)

Larger quantities on request.



Radish, Early Scarlet Turnip, White Tip

RADISH

1 oz. to 100 ft., 10 to 12 lbs. per acre.

For an early crop, sow in hotbed in January, February and March. As soon as ground is fit to be worked, sow seed in the open, in rows 1 foot apart. **Pkt. 10c; 1 oz. 20c.**

Crimson Giant. A favorite with home gardeners. Large globular root, 1 to 1½ inches in diameter, deep crimson, flesh firm.

Early Scarlet Globe. The earliest of all forcing radishes grown for market. Globular, uniform size, bright scarlet, white flesh, crisp and tender.

Early Scarlet Turnip—White Tip. This variety grows very quickly and is ready for picking in 25 to 30 days. Scarlet in color, turnip shaped, very crisp and of excellent flavor. One of the best varieties for the home gardener.

French Breakfast. A splendid variety for home use; oblong, bright scarlet, white tip. Grows about 1½ inches long and ½ inch thick.

Long White Icicle. Long slender roots which remain tender and crisp until mature. The small top permits close planting. Early.

Sparkler. 25 days. An early variety of a superior strain of the old Scarlet Turnip white tipped. 1¼ inch in diameter with bright scarlet top, a clear white base and small slender roots, this radish is excellent for the home garden or growing for market.

WINTER VARIETIES

Black Spanish Long or Round. A hardy, large, rather pungent variety for winter use. Keeps unusually well; is 8 to 9 inches long and 2 inches thick, slightly tapered. The skin is black and the flesh white and crisp. Round, about 4 inches in diameter.

Chinese White Winter (Celestial). Clear white and smooth; about 8 inches long, 2½ to 3 inches in diameter. Square shoulder and blunt bottom. Flesh white, firm, and crisp; mild; not as pungent as most winter varieties.

Scarlet China Winter (Chinese Rose Winter). A large rose-colored variety from the Orient. Hardy and rather mild. The flesh is white, and very crisp. This variety is broadest at its base and is 4 to 5 inches long.

RUTABAGA or SWEDE

1 oz. to 100 ft., 2 to 4 lbs. per acre.

The culture is the same as for turnip, but if anything, less exacting in care. **Pkt. 10c; 1 oz. 20c; ¼ lb. 60c.**

Improved American Purple Top (or Long Island Improved). The old, popular standard sort both for stock feeding and table use. Flesh yellow, solid and sweet. Is globe shaped, of large size, of fine quality.

Purple Top Neckless. Resembles Purple Top but has a medium top and very small neck. Roots are large, flattened globe in shape, yellow with purple top. Flesh is yellow, firm and of excellent quality.

SALSIFY, Vegetable Oyster

1½ oz. to 100 ft., 7 to 8 lbs. per acre.

The roots of this vegetable are appetizing and nutritious and the flavor is like that of oysters. Salsify succeeds best in a light, well enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided, as it will cause the roots to become irregular and branched. Sow early and quite deep, giving the general culture recommended for parsnip. **Pkt. 10c; 1 oz. 50c.**

Mammoth Sandwich Island. Large and strong growing with long, smooth, white, tapering roots. Less likely to branch than those of other sorts.

SPINACH

1½ oz. to 100 feet, 10 to 20 lbs. per acre.

Sow in rows 16 to 20 inches apart and thin to 6 inches apart in the row when leaves are an inch wide. In the North, seed can be planted as soon as the ground can be prepared. In the South, spinach will winter over with little or no protection. **Pkt. 10c; 1 oz. 15c.**

Bloomsdale Improved Thick Leaf. The seed of this thick leaved variety produced the largest spinach. Growth is rapid and the leaves remain in good condition a long time. The medium green leaves are large, rounded, slightly crumpled, succulent, and tender.

Nobel, or Giant Thick Leaved (All-American). Of rapid growth. The leaves are the largest of any type and keep well after picking; medium-green, rounded, slightly crumpled, succulent and tender. Excellent for the home garden.

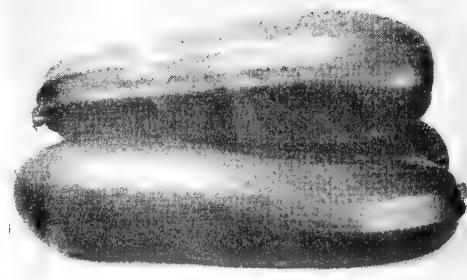
New Zealand. Not true spinach though similar when cooked. Thrives in hot, dry weather. The large, spreading plants have small, thick, pointed, deep green leaves, which can be picked repeatedly throughout the season. **Pkt. 10c.**

SQUASH

Vining, 1 oz. to 100 feet, 4 lbs. per acre. Bush, 1 oz. to 100 ft., 4 to 6 lbs. per acre.

Seeds should be planted about the middle of May, in hills 4 feet apart for bush varieties, and 10 feet apart for the running sorts. Put 5 to 8 seeds in each hill; afterwards thin out, leaving 3 or 4 of the best plants. **Pkt. 10c; 1 oz. 25c.**

Zucchini or Italian. The favorite Italian squash. It should be eaten when quite young, 4 to 6 inches long. It is a delicious summer variety; very prolific, a few hills will suffice to keep the family well supplied the entire summer.



Squash, Dark Green Zucchini

Black Zucchini. Considered by many to be a better variety than the older type. Similar in all respects but dark green, smooth and cylindrical, without striping or mottling.

Early Summer Crookneck. Very early, 60 to 65 days. The bushy plant is very productive. Fruits attractive, weighing about 2 pounds. The skin is distinctly warted and bears a bright yellow color, while the flesh is pale cream, firm, and tender. A very good sort for home planting.

Early Prolific Straightneck. The peak of perfection in a summer squash. Fruits straight and smooth, of a delicate creamy color. Vines produce abundantly, 50 days.

White Bush Scallop. A popular variety bearing profusely small, rather flat, white squashes with a distinct scalloped edge. Is very early and has a fine flavor.

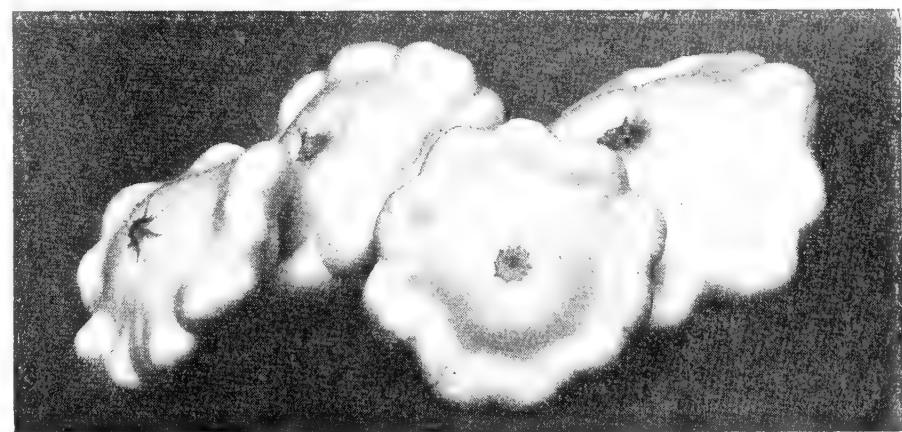
Golden Hubbard. A very good variety of medium size, weight about 8 pounds. An excellent keeper, has a thick rind which is a beautiful golden yellow.

Improved Hubbard. Large and of warty Hubbard type. Shell dark green, hard, moderately warted. Flesh light orange, very dry and richly flavored. One of the best winter squashes.

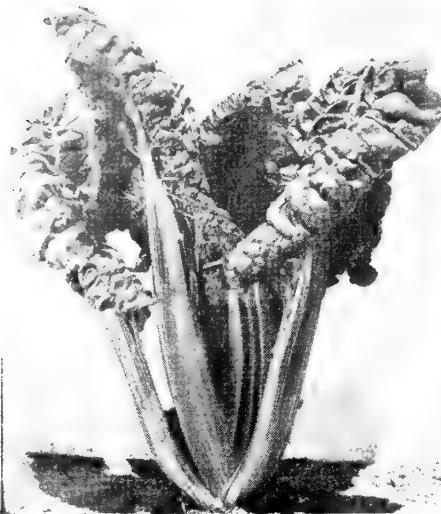
Table Queen or Danish. Small, dark green, acorn shape. Flesh deep yellow, dry, richly flavored. Medium early. A good keeper. Easy to grow. Delicious when served baked whole. Before serving cut open and remove seeds.

Banana. A late trailing sort, cylindrical and pointed at blossom end. A fine squash for pies. Free from fiber or stringiness. Flesh thick, deep yellow, dry, and of a sweet flavor. Has slate-grey rind.

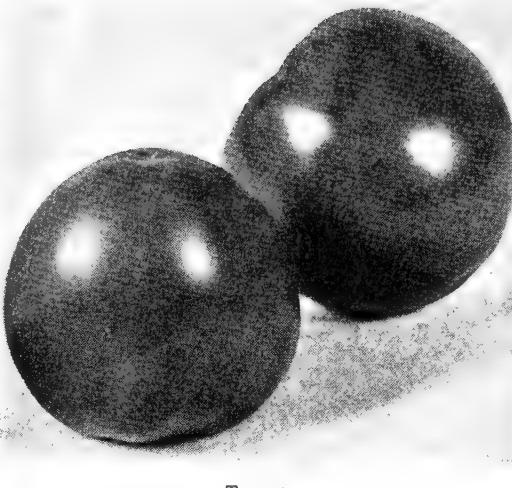
Umatilla Marblehead. Thick meated squash. Large, slate colored variety. Yields heavy.



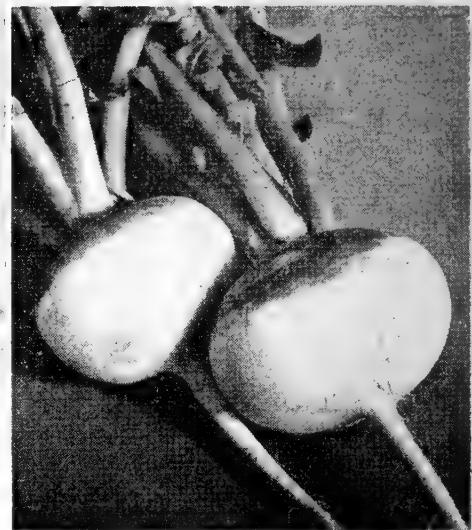
Squash, White Bush Scallop



Rhubarb Chard



Tomato



Turnip, Purple Top White Globe

SWISS CHARD

1 oz. to 100 ft., 6 to 10 lbs. per acre.

Only the tops of this beet are used, like spinach, and the succulent stalks and midribs may be prepared in the same way as asparagus. The plants are cultivated like beets except that they should be thinned to 8 or 10 inches apart. Pkt. 10c; 1 oz. 35c.

Lucullus, Dark Green. The fleshy crumpled leaves of this variety make very choice greens. Plant erect; stalks rounded and finely ribbed. Foliage a rich deep green.

Rhubarb Chard. A Swiss Chard that looks like Rhubarb. The leaf stalks are bright but delicate, translucent crimson; the rich color extends out through the veins into the dark green, heavily crumpled leaves. Different, tasty, delicious flavor. Easily grown, thrives everywhere. Pkt. 15c.

TOMATO

½ oz. to 100 ft., 2 oz. per acre.

In February or March sow seeds lightly in rows in greenhouse, hotbed, or window box, and when plants have reached a height of 3 inches, transplant in hotbeds. About June 1, set out in open ground, 4 feet apart, giving plenty of well rotted manure to each plant. Water freely during hot weather. To obtain the best results, trellises or stakes should be used. Pkt. 10c; ½ oz. 40c; 1 oz. 75c.

Bonny Best. One of the very best early varieties (75 days) for table and canning. Vine medium, not very hardy. Fruits medium sized, apple shaped, smooth; solid, bright scarlet in color, of excellent quality.

Earliana Improved. (65 days.) One of the earliest scarlet fruited varieties. Medium size, almost seedless and solid. Vine open and spreading. A heavy bearer. Succeeds everywhere.

Jubilee. (72 days.) Tomato of real merit; it is different from any other tomato of its class. Fruits are bright orange-yellow, globular and weigh about 6 ozs. Pkt. 10c.

Marglobe. (73 days.) Excellent home garden variety and particularly valuable for shipping. Plants thrifty and heavily productive with a long bearing period. Fruits uniform deep scarlet; large; uniformly globe shaped; smooth, solid, and of distinct quality.

Pearson, Improved. (76 days.) Primarily for canning but also of value as a shipper. Vigorous self-topping plants with ample foliage to protect the heavy set of fruits, which are medium large, semi-globe and of good red color.

TOMATO—Continued

Pritchard (Scarlet Topper). (70 days.) Wilt resistant and self-topping or self-pruning. Mid-season to late; prolific. Fruits globe-shaped, deep scarlet, smooth and solid. A good home and market variety and very popular for shipping.

Rutgers. (86 days.) A non-acid and disease resistant introduction which has deservedly achieved general popularity. Primarily intended for canning. It has also proved a good green-wrap shipper and all-purpose variety. Plant large with thick stems and vigorous foliage. Fruits globular, bright red, with thick walls and small seed cells.

Scarlet Dawn. (70 days.) Fruits medium large, globular, smooth, free from flat side. Attractive bright scarlet color; uniform. Plant of medium growth, fairly open, early and prolific.

Stokesdale. (73 days.) Produces heavy crops. Almost free of stem-end crack. Slightly earlier and larger than Mar-globe.

Victor. The highly publicized new tomato introduced by the Michigan State College. Fruits are about 3 inches in diameter, globe-shaped and ripen to a deep scarlet. Early.

Yellow Pear. (73 days.) Enormously productive, fine for salads or marmalade. Sweet and delicious. Small, yellow, pear-shaped fruits of exceedingly mild and pleasing flavor. Pkt. 10c; 1 oz. \$1.00.

Yellow Plum. (73 days.) Oval plum-shaped fruits, 2 inches long. A clear deep yellow. Used for preserves. Pkt. 10c; 1 oz. \$1.00.

Ground Cherry or Husk Tomato. Fruits small, yellow, enclosed in loose paper husks. Very much prized for preserving. Pkt. 10c; 1 oz. \$1.00.

TURNIP

1 oz. to 100 feet, 2 to 3 lbs. per acre.

For the main crop, sow in open ground from May to July; for winter use, during July and August. Set out in rows 1½ feet apart, allowing a space of 6 inches between the plants. Pkt. 10c; 1 oz. 20c; ¼ lb. 60c.

Cow Horn. This variety is pure white; in shape like a carrot, growing nearly half out of the ground, and slightly crooked. It is delicate and well flavored. Used also as a green manuring crop. Table size in 65 days; mature in 75 to 80 days.

Golden Ball or Orange Jelly. A splendid variety for table use; of excellent flavor. Tops small, cut leaved. Roots globular, commonly 4 inches in diameter. Skin smooth, orange-yellow; flesh yellow, firm, fine grained and of good quality. Rapid grower. Plant during cooler months only. Table size in 60 days.

Purple Top Strap Leaf. A medium early, very productive variety. Tops medium small, upright, strap-leaved. Roots flat, purple red at the top, white below; flesh white, fine grained and tender.

Purple Top White Globe. This variety may be grown to quite a large size without developing signs of coarseness. It is of spherical shape with white skin, the upper one-third being colored reddish purple. Flesh pure white, firm, fine grained and of superior flavor. Good keeper. Fine for table use and stock feeding. Table size in 55 days, mature in 70 days.

Purple Top Yellow Aberdeen. Full size in about 80 days. Of high quality. One of the best keepers. Globular or slightly flattened, usually about 5 inches in diameter, smooth, upper part purplish-red, lower part pale yellow as is the crisp, firm, sweet and tender flesh.

Snowball. A desirable sort for home use and early markets. Tops small and erect. Roots medium sized, round, white throughout, sweet, crisp and tender. Table size in 40 days.

WATERMELON

1 oz. to 100 ft., 3 to 4 lbs. per acre.

Rich, rather sandy soils produce the finest crops of watermelons, but a well-drained loam, especially with a southern exposure is also suitable. Place 6 to 8 seeds in a circle in each hill, and cover ½ inch deep with fine soil. One ounce will plant 20 to 25 hills; 3 to 4 pounds per acre. Pkt. 10c; oz. 20c.

Black-Seed Ice Cream. The melon is almost round, with a thin medium green rind. The inside flesh is pink and exceptionally sweet and fine flavored. This variety matures early and is fine keeper.

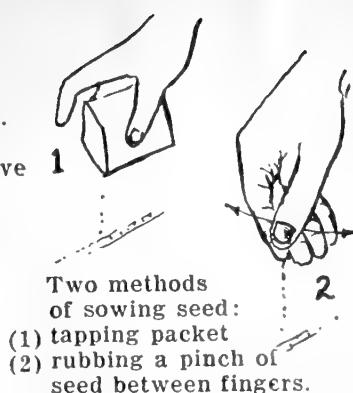
Kleckley's Sweet. A medium size melon, rind very green and flesh deep red. Delicious flavor. An excellent melon for either home garden or shipping. Weighs about 30 pounds.

Klondike. An early sort, a good shipper and popular in Western home gardens. Fruits oblong, slightly tapered, medium sized with slight ribs; rind medium hard. Flesh bright deep red, very sweet; unequalled eating quality.

Blue Ribbon Striped Klondike. An early garden and shipping variety similar to the regular Klondike but with irregular dark green stripes. Wilt resistant. Fruits oblong, of medium size. Flesh the deepest red known to watermelons; sweet and crisp. seed small. Pkt. 10c; 1 oz. 30c.



Walk on a board when sowing seed. Make a V-shaped groove for seed.



- Two methods of sowing seed:
 (1) tapping packet
 (2) rubbing a pinch of seed between fingers.

Plants are safer and easier to use for tomato (sketch) pepper, cauliflower, egg plant, celery and cabbage. Select vigorous plants properly hardened to resist cool weather. Protect with "Hotkaps" when weather is unsettled.



HOW TO SET PLANTS



WHAT AND HOW TO PLANT

In selecting vegetables to plant include the ones your family should eat as well as the kinds they like. A well balanced diet is most important and should include green vegetables, yellow vegetables, leafy vegetables, root vegetables, and tomatoes.

Flowers to complement the vegetables. More does not stop with the stomach. Flowers for the house, fresh from the garden, are essential. Plant them, as shown, on the plan to make the view from the house attractive and colorful.

SOW SEEDS AT RIGHT TIME

Sow seeds at the proper season and avoid waste. We have the highest quality seeds available.

Work down the top soil with a rake until it is level, fine and in perfect physical condition, before attempting to plant seed.

Seed should be sown thinly in shallow rills, made with a stick as shown in the sketch. To make the rows straight, follow a line of string stretched between stakes placed at either end of the row. The depth of this rill depends on the variety sown. Check with the depth of planting chart on page 3 before sowing seed.

Seed may be sown directly from the packet, or by rubbing a pinch of seed between the thumb and the first two fingers. This latter method gives a thinner distribution of the seed. Small seeds should not be thicker than 10 to the inch. Sow one row at a time and after each row, cover the seed lightly, touching the loose soil with a rake. Place the board used for walking between the row on top of the sown seed and walk across it to firm the soil for better germination.

Treatment of the seed with "Cuproicide" will eliminate a great deal of damping off, and rotting of the seed after sowing, especially if sown during the wet weather.

If the soil is moist, but not wet, at the time of sowing, watering will not be necessary before the seedlings are up. If it dries out, however, sprinkle carefully so as not to wash out the small seedlings.

USE PLENTY OF GOOD FERTILIZER

Fertilizers are very important. The food value of garden vegetables for human consumption depends greatly on their mineral content, derived from the soil. The vitamin content depends on the vigor of growth and the abundance of sunlight. Therefore, the fertilizing of the soil is important to insure vigorous growth and healthy mineral and vitamin-

rich vegetables. A good practice is to spade commercial fertilizer, balanced to supply the necessary proportions of nitrogen, phosphorous and potash. Later in the season, applications of fertilizers in small doses, as side dressings, keep vegetables in active growth. Ask us for special fertilizer formulas for vegetable gardens.

WATERING IS IMPORTANT

Watering will be necessary during the growing season. It should be done early enough in the day to evaporate drops of water from the leaves before nightfall. Water generously, soaking the soil deeply each time, rather than by quick "sprinkles" with the hose. In this way, the roots will grow deep, feed better and be protected from drought, in case watering is missed during a hot dry spell. Once every week or ten days should be ample for moist soils. No rules can be formulated to determine the necessity of watering. Observation of the soil, and testing with a shovel, will best determine when to water.

SPRAY AND DUST FOR PESTS

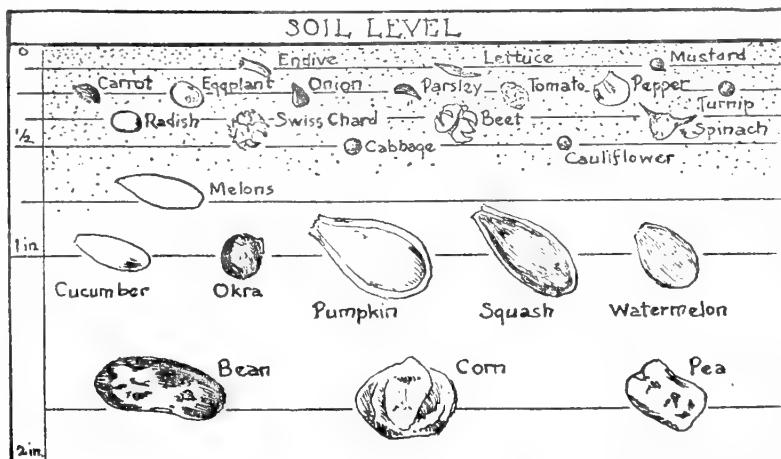
Insects and diseases may infest the vegetable garden but may never become a serious problem if one watches for evidence of damage and takes prompt action. Sprays and dusts are available in convenient packages to combat every garden pest. When spraying cover all parts of the plant and both sides of the leaves. Do a thorough job promptly and avoid a serious infestation.

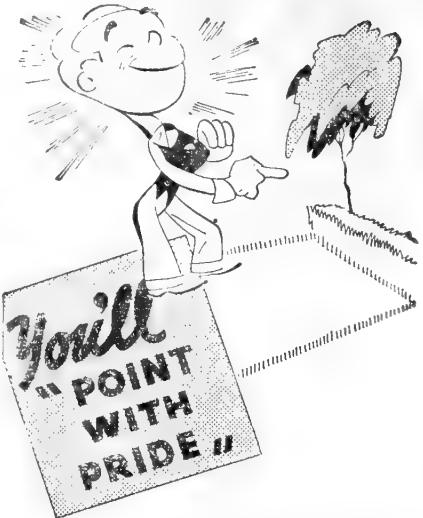
Success in gardening starts by following certain rules. Whether these are noted from the pages of books or gathered from practical experience makes little difference. The process is the same. Good seed, soil, water, fertilizer, and work makes for success.

If we understand that almost every seed we sow has stored within its shell the ability to sprout and grow into a useful plant we can easily think of the seeds as plants ready to set out which will make the picture of the finished garden clearer in our mind's eye, thus avoiding many of the early mistakes of planting.

Seeds are started by sowing in the soil of the garden. There germination takes place readily when conditions required for growth are met. Fortunately good garden soil, well prepared meets these requirements: soil moisture, usually present after winter rains or supplied by irrigation; soil temperature, heat from the sun and the main reason why certain tender seeds should be delayed in sowing, (until the ground is warm), and air and moisture drainage supplied by the hard work of soil preparation which we have been recommending. As far as fertilizer is concerned young seedlings don't need extra feeding until they have used up the stored food of the cotyledons. It is better to delay feeding until growth is well started and then apply gradually. This is in addition to the humus (manure, peat, compost, etc.) and phosphate and other fertilizers put into the soil at the time of preparation. They are deeper down and can be reached by the plants as they grow.

By thinking of the seeds as plants we will sow them far enough apart to reduce drastic thinning. We wouldn't set plants out very close because before long we would not have much of a garden, competition between the plants would reduce the flowers, fruits and shape of the individual plants to an undesired minimum. In both vegetable and flower gardens we strive for perfection in either flowers, fruits or foliage—poor quality is seldom tolerated.





- To your
- LAWN
- FLOWERS
- GARDEN
- SHRUBS
- and
- TREES

if you *fertilize* with
MILORGANITE



Here is an easy-to-use, safe, clean, remarkably effective fertilizer that "has what it takes" for healthy, luxuriant plant growth. Milorganite is **non-burning**, long-lasting in effect, always granular and dust-free. Get a bag **today** . . . and be one of those who will "point with pride"!

Packed in convenient 100 lb. bags with complete directions for use.

100-lb bag \$3.95

Greener Lawns—

Less Watering

FERTILIZING with a **GAT SPRAYER**



NO Burning
NO Odors
NO Waste

PLANT PROTECTORS

KEEPWAY
PROTECTOR
TARRED
PLANT

KEEPWAY TARRED PLANT
PROTECTORS

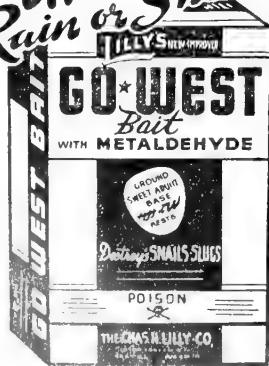
NON-POISONOUS

Humans — Pets — Fowls
Sure — Safe — Simple

Protection from root maggot on Cabbage, Cauliflower, Broccoli, Brussels Sprouts, etc. Apply when setting plant out into the garden as shown in the cut. Protection lasts until plant maturity. The Coal Tar odor keeps the maggot fly away. Full directions on labels of packages. 24 - 10c, 72 - 25c, 500 - \$1.50, 1000 - \$2.60. Larger quantity prices on request. Postage allowed to second zone.

Eliminate Garden Destroyers with **GO-WEST BAIT** (with Metaldehyde)

Effective
Rain or Shine!

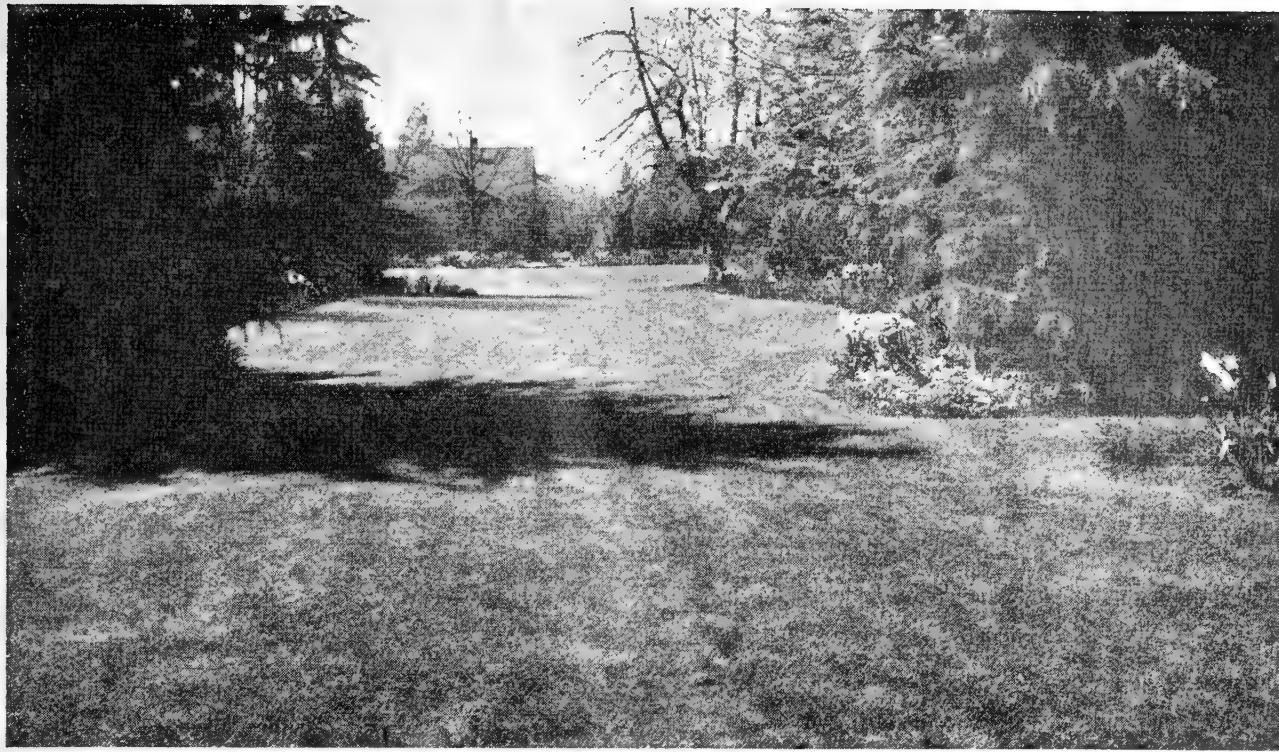


Slugs — snails — cutworms — earwigs — sowbugs — Strawberry Root weevils, attracted by **fresh apple base** in GO-WEST BAIT, are effectively destroyed. Apply GO-WEST BAIT regularly from March to November and protect your garden. Clean and easy to apply. Effective in all weathers. Long-lasting.

Seattle 4,



Washington



SPECIAL BENT LAWN MIXTURE

The Best All-Purpose Lawn Grass Seed. Price, 1 lb. \$1.50.

A wonderful mixture that is the result of years of experimenting. It is especially prepared by us from the highest quality seeds that can be produced. It makes a smooth, green, velvety lawn with a thick bottom, free from common grasses which are inclined to produce clumps or knots. Only the very finest varieties of the most suitable grasses for making an even, thick turf are used in this mixture. The various grasses composing this well-balanced blend are fine-bladed and deep rooting, sure to produce the best results under average conditions of soil and climate. It is all plump, heavy seed free from chaff or weed seeds. Sow 1 pound for a plot 10 by 20 ft. (200 sq. ft.); 100 to 150 lbs. of seed are required to sow one acre.

Ask for Prices on Other Lawn Seeds

Astoria Bent. This strain of Bent differs from the Seaside variety in that it does not send out stolons, but that it spreads underground, sending up many root stalks that produce a splendid turf. The growth is upright, of fine texture and is a richer green than Seaside Bent. It is more practical for lawns and succeeds best in heavy soils. Sow 1 pound to 200 square feet.

Seaside Creeping Bent. Coos County strain, is the true creeping bent. The plant is dwarf and it multiplies rapidly by sending out runners in all directions; from these, new plants are produced, which in turn grow more runners. The turf becomes matted, and if damaged it heals over promptly. Sow 1 pound to 200 square feet.

Chewings Fescue. Used extensively on putting greens, fairways and tees on golf courses, and does well on any kind of soil. It also produces a stiff, upright plant. Sow 1 pound to 150 square feet.

Creeping or Red Fescue. Fine, round bladed grass, excellent for lawns. Slightly reddish at base. Fine for shade. Hardy.

Kentucky Blue Grass. Makes an excellent lawn of a dark green color. It forms

a fine mat, and with care and water makes one of the best lawns. Sow 1 pound to 200 square feet.

Shady Blue Grass (*Poa trivialis*). An ideal perennial grass for shady spots which is closely related to Kentucky Blue Grass, but somewhat finer and softer in texture. It is a creeper with an apple-green color. Requires plenty of water. Sow 1 pound to 200 square feet.

Shady Lawn Mixture. This grass is especially adapted for growing in very shady places or near buildings where other grasses will not grow. If you have a shady, barren place, try our Shady Lawn Mixture. Sow 1 pound to 200 square feet.

White Dwarf Clover. Very low growing sort, principally used in poor ground to give a green cover. Many like it in lawns, especially where grass does not do well. Sow 1 pound to 300 square feet.

Rye Grass. A rapid growing grass where quick results are required. It is coarser than Kentucky Blue Grass and thrives in poor soil. It is used as a "nurse" crop in mixture to keep the lawn green while the better, slow-growing varieties are becoming established. Sow 1 pound to 150 square feet.

Red Top. A fine-bladed grass that succeeds on almost any soil, although it does best under moist conditions. It is used in almost all lawn mixtures. Should not be planted by itself unless specifically recommended. Sow 1 pound to 200 square feet.

How to Have A Good Lawn

Spade the ground deeply and see that it is thoroughly pulverized. Work in a good commercial fertilizer. Sheep guano or peat moss will add humus and improve the seed bed. Rake level and water thoroughly so the ground will settle. The seed bed should be allowed to stand for about two weeks, watering from time to time so the weed seeds will sprout.

Roll the ground before seeding, to prevent it from settling unevenly, and then rake the surface lightly. Sow the seed so as to cover the ground thoroughly, and then cover it lightly with soil. Roll again so as to press the seed in firmly. If you have no roller, use boards and tramp on them so as to pack the ground firmly, but a roller is preferred.

Grass seed will germinate in from 8 to 15 days, according to the weather. If a lawn is made during the summer, the ground should be covered lightly with peat after the seed has been rolled, so as to retain the moisture. New lawns should not be allowed to dry out, not even for a half day. For the first 15 days the lawn should be watered twice a day if necessary. A lawn should be fertilized after the first cutting, and at least twice a year. Water well after applying.

WARNING: Do not use the so called rotted manure which is being sold to inexperienced gardeners. It may be full of wild clover and other weed seeds and pests. It is expensive when you take into consideration that a few pounds of good fertilizer is equal to a sack of manure. If you want a moisture-holding material for top-dressing use peat. We recommend the use of peat.

FIELD SEEDS... Write For Our Competitive Prices

ALFALFA

Sow 12 to 15 pounds per acre.

Grimm Alfalfa. State Sealed and Certified Seed. Grimm Alfalfa is a very hardy and consistent producer. It is recommended for all sections West of the Cascades.

Ladak Alfalfa. A variety ideally adapted to dry soil which cannot successfully grow the more common varieties. Strongly resistant to freezing. Also gives good results under irrigation in the Northwest.

Common Alfalfa. Universally grown popular long-rooted variety. Best adapted to deep soils.

BARLEY

Sow 120 to 150 pounds per acre.

Success Beardless Barley. Spring. Straw about height of common barley. Stands up better than other varieties.

White Hulless or Bald Barley. (Beardless). An early spring variety. When threshed hulless is like wheat.

Hannchen Barley. Heavy yielding, spring variety, medium early, white, two row, bearded type.

Trebi Barley. Spring. This is a six-rowed-bearded, hulled barley adapted to irrigated conditions.

BUCKWHEAT

Sow 50 to 60 pounds per acre.

Japanese. This is the largest growing buckwheat. Makes a more vigorous and larger growth than the common kind.

Silver Hull. The kernels are gray and are much smaller than the Japanese variety. They are very plump and heavy.

CLOVER

Mammoth Red Clover. Also called "Pea Vine" Clover. This variety grows larger and coarser than the medium and is often used for plowing under to enrich the soil. Sow 6 to 10 pounds per acre.

Ladino Clover. Is a very large form of white clover, usually making a growth of 8 to 12 inches. A perennial. Can be grown on rather shallow land where well supplied with humus and moisture. Sow 4 to 6 pounds per acre.

White Dutch Clover. A very hardy creeping clover, which adapts itself to a great variety of soils and climates. Sow 6 to 8 pounds per acre.

Yellow Sweet Clover, Biennial. In great demand on account of its earliness, being about two weeks earlier than the white. Produces high quality hay. Sow 12 to 15 pounds per acre.

White Sweet or Bokhara Clover, Biennial. Excellent for pasture and hay. More drought-resistant than alfalfa. Thrives on light alkali soil. Sow 12 to 15 pounds per acre.

Red Clover. Is excellent for pasture and hay. Will thrive in slightly wetter and more acid land than alfalfa. Sow 6 to 10 pounds per acre.

Alsike. Very hardy, adapted for sowing on cold, wet land. Planted at the rate of 8 to 10 pounds per acre, it yields a large amount of hay or pasture and is a good bee plant.

Strawberry Clover. Undoubtedly one of the most satisfactory of recently developed legumes. Resembles White Dutch Clover, but spreads faster and lives longer. Free from insect and disease attacks. Sow 6 pounds per acre.

FIELD CORN

8 to 10 pounds per acre.

Minnesota "13" Yellow Dent. An early maturing yellow dent corn that is a favorite in all corn-growing sections.

The stalks are of medium size, the ears 9 to 11 inches long.

Pride of the North. An early maturing, long-kerneled yellow sort that we recommend for any corn district in the west.

FLAX

Flax may be grown with good success in the West. It matures quickly and may be planted as late as the middle of June. Yields 10 to 20 bushels per acre. Sow 42 pounds per acre.

GRASSES

Bromus inermis (Awnless Brome Grass). The best grass we have for the drier regions of the Northwest. Sow 25 to 30 pounds per acre. Spring or fall.

Meadow Fescue. This is a very valuable species for permanent grass lands and is relished by livestock both as hay and pasture. Sow 15 to 20 pounds per acre on well prepared soil.

Mesquite. Used on burned over, virgin soils. No cultivation is necessary. Sow seed at the rate of 15 pounds per acre.

Oat Grass. Tall Meadow. The earliest grass to start in the spring. For pasture sow 20 to 30 pounds per acre.

Orchard Grass or Cocksfoot. Valuable if planted alone or mixed with other grasses. Seed should be broadcast at the rate of 20 to 28 pounds per acre on well prepared soil.

Perennial Rye Grass. A strong growing, hardy perennial grass, noted for its nutritive qualities. Sow 25 to 30 pounds per acre.

Italian Rye Grass. A quick growing grass, attaining a height of 2½ to 4 ft., desirable for temporary meadows or pastures. Sow 25 pounds per acre.

Common Rye Grass. Similar to Italian. The finest rye grass grown; superior to imported Pasture. 25 pounds per acre.

Timothy. This is a very valuable grass for hay. Thrives best on moist, loamy soil. Sow early in the spring or fall at the rate of 8 to 10 pounds per acre.

Irrigation Pasture Mixture. A blend of Number One grade of grasses and clovers especially adapted for growing on irrigated land for permanent pasture. Sow 20 pounds per acre.

Sudan Grass. An excellent annual drought resisting forage plant. All stock relish it. Sow in spring. 20 to 30 pounds per acre.

Red Top. A valuable grass for moist soils. It is a good, permanent grass. It should be grazed close. Sow 10 to 15 lbs. per acre.

Kentucky Blue Grass. This is an excellent grass for pasture for all kinds of stock. It is very hardy. Sow 20 to 25 lbs. per acre.

Crested Wheat Grass. This is the valuable plant for our Western country and thrives well in semi-arid sections. Sow 10 to 15 pounds to the acre.

Superior Reed Canary Grass. A hardy perennial grass which succeeds in spite of long summer dry periods. Produces a large quantity of succulent, palatable forage. Sow 5 to 12 pounds per acre.

MILLETS

Japanese Barnyard Millet. This millet is exceedingly palatable and is the best of summer green feeds for the cool coast sections. Sow 20 to 30 pounds per acre.

German or Golden. Will grow on any good land and yields heavily when irrigated. Yields from 30 to 40 bushels of seed.

Hog or Proso. The seed is large. Feeding value almost equal to corn. It is a valuable feed for hogs and cattle.

OATS

Sow 60 to 80 pounds per acre.

Victory. Grain of medium size, short, plump, white, thin hull, nearly beardless. A heavy yielder. The straw is stiff and firm.

Swedish Select. Kernel is white, large and plump, hull thin, and straw is stiff and strong. Does not lodge.

Gray Winter Oats. Usually hardy. Seeded in winter, fall or early winter. May be sown in the spring for hay along coast.

FIELD PEAS

Austrian Winter Peas. Here is the ideal forage legume for hay, ensilage or for pasture. Austrian Winter Peas under many conditions will outyield vetches. Sow 75 to 90 pounds per acre.

Canadian. This legume has the distinct advantage of being suited to late planting. Canadian Field Peas produce excellent forage. May be used for summer green manure crop. Requires considerable moisture. Sow 120 to 150 pounds per acre.

RYE

Sow 85 to 115 pounds per acre.

Spring Rye makes a successful growth in rather poor soils where other grains would fail. Makes early pasture and may be cut and cured for hay.

Winter or Fall Rye serves a very useful purpose for pasture and hay. May be sown in the spring and summer as well as in the fall.

Rosen or Petkuser Rye. A winter variety of recent introduction, it is becoming very popular among growers of winter rye.

RAPE

Dwarf Essex. This crop is very highly recommended for pasturage for sheep, cattle, and hogs. It also makes splendid green feed for poultry. Plant 10 pounds per acre, in early spring.

SOYBEANS

Soybeans are annual legumes widely adapted to various soils and not difficult to grow on the warmer more fertile soils. Are excellent as a summer catch crop and splendid soil builders.

VETCH

Sow 40 to 60 pounds per acre.

Common Vetch. Resembles peas and valuable for forage and green manure. As a hay crop it is generally sown with oats or wheat to afford support for the vines.

Hairy Vetch. Thrives on all soils. Makes a better growth during the cold season than the other varieties.

Hungarian. Finer stemmed and leafier than most forage vetches. Suitable to various types of soils. Resistant to aphids.

WHEAT

Sow 75 to 90 pounds per acre.

Marquis Spring Wheat is the standard, hard, red spring wheat for irrigated sections of the West. It is early maturing and high yielding. It is beardless, short, stiff-strawed.

Turkey Red Winter Wheat. A standard red bearded wheat with a strong straw. It is early ripening. Kernels are large, red and hard. It is in good demand by millers.

Thompson Club or White Russian Wheat. The most widely used spring wheat planted in the irrigated districts of Eastern Washington and Oregon. It is a beardless, soft white variety which out-yields all other common varieties.



"The Heart of Every Home"...

A Lovely Garden!

If you want to achieve the garden that will be the envy of the neighborhood and win praise from friends, be sure that you feed it.

Feed everything you grow with Vigoro, complete plant food made by Swift & Company.

Vigoro is balanced for grass—helps develop deep, sturdy roots—and an abundance of top grass.

You'll find Vigoro EXTRA convenient for it is fine for feeding everything you grow.

A PRODUCT OF SWIFT

VIGORO
COMPLETE PLANT FOOD

FERTILIZERS

ALL SOLD AT CURRENT MARKET PRICES. ASK FOR QUOTATIONS.

Ammonium Sulphate is a valuable fertilizer for all plants in which a large leaf development or rapid growth is desired. It will stimulate growth almost immediately. It is also used for top-dressing lawns, producing a thick velvet growth and discouraging the weeds. It is a highly concentrated nitrogenous product, containing 25 1/4 per cent ammonia, 20 1/4 per cent nitrogen. One pound to 200 square feet is sufficient application for lawns.

Bone Meal. Extra fine; is a fertilizer recommended for lawns, rose bushes, grape vines, especially where a moderately slow fertilizer is needed for the deep-rooted shrubbery and where a perfectly safe fertilizer is required. It contains phosphoric acid and some nitrogen.

Granulated Peat Moss. For greenhouse, garden and home. Our peat moss is of the finest quality you can buy anywhere at any price. Its use contributes to the humus content of the soil, lightening heavy clay and binding sandy soils. It insulates soil against freezing and thawing in winter and conserves moisture in summer. Clean, odorless and economical to use.

Sheep Guano. An efficient fertilizer to use on lawns, in the garden, the perennial border, shrubbery beds, small fruit garden, flower beds, etc. It is safe and dependable. A natural plant food and not a chemical stimulant.

Nitrate of Soda. A fertilizer for all crops; quick in action and hastens the maturity of crops fully two weeks. It should not be applied until the plants are above the ground. Do not allow solution to touch foliage. Dissolve 1 oz. to 2 gals. or 1 lb. to 50 gallons.

Superphosphate (Acid or Rock Phosphate) is a water soluble combination of phosphoric acid and lime which is formed by the action of sulphuric acid on raw phosphate rock. It aids in plant nutrition and assists the plant to assimilate other ingredients. Superphosphate is an efficient fertilizer element for lettuce, truck crops, cereal crops, and alfalfa.

Hydrated Lime. The constant watering of lawns tends to sour the soil and eventually the lawn becomes foul with sorrell, Creeping Charlie, and other weeds which thrive in an acid soil. This condition may be improved by applying hydrated lime.

Muriate of Potash. This fertilizer is especially valuable for fruit trees and berries.

NON-WARRANTY. We exercise the greatest care to have all of our seeds and bulbs of good quality and true to name. Once sold, however, their growing conditions are beyond our control. Therefore, we operate under the usual **Seedsman's Non-Warranty:** We give no warranty, express or implied, as to the productiveness of any seeds or bulbs we sell, and will not be in any way responsible for the crop. Our liability in all instances is limited to the purchase price of the seed.

Important Ordering Suggestions

Free Transportation on All Flowers and Vegetable Seeds in Packets, Ounces or 1/4 Pounds.

All seeds quoted in this catalog are shipped by Parcel Post, all transportation and packing charges are paid by us. C.O.D. and money order return fees are not considered as transportation charges and, therefore, must be paid for by the customer. Avoid them by sending remittance with order. Bulk seeds, such as Peas, Beans and Corn, in quantities, are shipped to your nearest express or freight office, transportation collect. If you wish them shipped by Parcel Post, please send necessary postage.

SHIPPING ORDERS. When goods are to be shipped by Freight or Express, give plain shipping directions; otherwise we use our best judgment in routing. Goods on which we pay transportation are shipped at our option.

SEND MONEY. Remittances should always accompany the order. Remittances may be made at our risk by any of the following methods (1st and best) Post Office Order; (2nd) Bank Draft; (3rd) Express Company Money Order; (4th) Cash by Express in amounts not less than \$50; (5th) Registered Letters.

WE GUARANTEE the safe arrival of your order.



HASTINGS

SOIL-SOAKER

Made of canvas — scientifically treated to resist mildew. **SOIL-SOAKER** is open only at one end and screws to the end of the water hose, replacing the nozzle. When the water is turned on, **SOIL-SOAKER** fills with water and normal pressure forces water through the pores of the entire

surface, uniformly, without spray. Easily moved without shutting off water, or getting wet. Self-cleaning. The soil is soaked deeply and thoroughly, covering an area on all sides of the **SOIL-SOAKER**. Far more beneficial than light surface-sprinkling. Puts the moisture down into the soil. Avoids water waste.

SOIL-SOAKER enables you to put the water exactly where you want it—none sprayed on walks, driveways or other places you do not want to reach. Excellent for irrigating around plants where moisture is apt to damage foliage. Water deep with a **SOIL SOAKER**. Two lengths. 18-ft. \$2.15, postage paid; 30-ft. \$3.25, postage paid.

Look, Lady...
GAINES
TASTES
SWELL!

Actual survey figures prove it! They show 9 out of 10 dogs like Gaines from the start! And Gaines offers them the very food factors they're known to need. Easy and economical to feed! Just add water—nothing else to **GAINES**.



GAINES MEAL

1 lb. in bulk	\$.15
7 lbs. in bulk	1.00
25 lbs. in bulk	3.00
50 lb. sack	5.75

F.O.B. Portland, add postage.

SPEEDLINE GARDEN TOOLS

MADE ESPECIALLY *for the GARDEN!*

Light, keen, fast . . . small enough for use in flower beds but strong and balanced for real, hard work.

18 NUMBERS OF THE HIGHEST QUALITY TOOLS:



Soil Stir, Sharpshooter, Speedy Cultivators (4 & 3 tine), Lawn Broom (adjustable width), Garden Shovel, Push-Pull (the crust breaker), Turf Edger, Dandelion Rake and Weeder, Garden Rakes (Round Bow Pattern or Level Head), Spading Forks (Light and Heavy), Warren (heart shaped) Hoe, Two Prong Hoe, Regular Garden Hoe, Narrow Nursery Hoe (2 1/2 inches).

These are the Blue-Handle-and-Gold Trim Tools you've known about. Put them to work in your own garden. They're reasonable in price, a delight to use and to own.

SPEEDLINE Tools are guaranteed against defect in materials and workmanship while used in the service for which they are intended.

The UNION FORK & HOE CO., Columbus, Ohio

SPRATT'S DOG AND PET FOODS



SPRATT'S DOG BISCUIT FOODS

For over 80 years the best-known dog foods in the world. Contain "Meat-Meal Filbrine"—baked into the biscuits. A complete, well-balanced food for all breeds of dogs.

Spratt's Dog Foods are supplied either in biscuit form or granulated (broken up). They can be fed dry or mixed with vegetables, gravy, broth, etc. For grown dogs one heavy meal in the evening is enough with a few dry biscuits in the morning.

Spratt's-fed dogs are healthy dogs. Their teeth and gums will be firm, their digestion normal, coat glossy and breath sweet and pure. Bowel trouble and skin disorders, so common in dogs fed on soft and sloppy foods, will be conspicuous by their absence.

Spix Dog Biscuits. The bone-size biscuits for all dogs. Convenient shape, easy for the dog to grasp. Ideal for all medium and small breeds. (For large breeds see Dog Cakes, large, square biscuits.) Per lb. 20c.

Fibro. Granulated food (about the size of peas). For dogs of all ages, breeds or condition of health. Contains pure yolk of egg in addition to meat meal. Very nourishing and appetizing. Per lb. 20c.

Ovals. Small oval biscuits. Wonderful for all breeds, especially small dogs. Contain plenty of meat meal; crunchy and satisfying. Convenient to carry in your pocket when on a walk with your dog. Per lb. 20c.

Charcoal Ovals. Same as Ovals with pure Charcoal added—black in color. Absorb intestinal gases and impurities, wonderful safeguard against intestinal and stomach ailments. Every dog should have two full meals of these each week; meat-fed dogs even oftener. Per lb. 20c.

Dog Cakes. Large, square cakes; the staple diet for the large and medium breeds. Should be fed dry. Per lb. 20c.

Assorted Dog Biscuits. A variety of several of Spratt's most popular Dog Biscuits. Contain Spix, Ovals, Charcoal Ovals and Cod Liver Oil Ovals. Per lb. 20c.

CAT FOODS

Cat Food. A granulated food for all cats. Contains meat meal, fish and milk—a well-balanced and complete food. Can be fed dry or mixed with meat, sardine oil, etc. Pkgs. 10c and 35c.

Catnip Leaves. Choice catnip leaves and tops. 15c per pkg.

Catnip Mouse. A cloth mouse filled with catnip. 15c each.

PUPPY FOODS

Puppilac. A full cream powder, for feeding very young puppies, hand-feeding orphans, etc. Can be fed from birth until weaning time. Richer than cow's milk, the ideal substitute for the mother-dog's natural milk. 10-oz. pkg. \$1.00.

Pepsinated Puppy Meal. For feeding young puppies before and after weaning. Contains pure pepsin, extremely assimilative. 12-oz. pkg. 40c.

Plain Puppy Meal. The standard weaning food. For feeding puppies until old enough to eat more solid food. 12-oz. pkg. 20c.

Prices for Larger Quantities on Application

DOG SUPPLIES

Flea Powder. In shaker-top tins. Highly effective for ridding your pets of fleas (non-poisonous). Per pkg. 50c.

Dog Soap (White). The ideal soap for the dog's bath. Produces beautiful glossy coat, leaving skin clean. Non-poisonous—but will kill fleas. 25c per bar.

Flea Soap (Black). To be used when the dog is bothered by fleas. Healing and disinfecting. Lathers freely, cleans thoroughly, kills fleas. Per bar 30c.

Spratt's Liquid Shampoo. A scientific preparation which will be found most effective in cleansing and keeping the coat in good condition. Also aids in the elimination of doggy odors. This shampoo is also recommended for use on the human head. Leaves the hair both soft and silky and the scalp clean and free from dandruff. Per bottle 35c.

Spratt's Dry Clean Powder. For dry cleaning all dogs. Especially recommended during cold and inclement weather when it is not advisable to wash dogs. Will clean dog's coat thoroughly and also eliminate doggy odors. Per package 30c.

BIRD FOODS

Roller Canary Mixture. The best mixture of imported seeds obtainable. also contains fruit flakes and egg. The ideal diet for canaries. 40c pkg.

Mixed Bird Seed. A combination of re-cleaned seeds for all canaries. The standard daily diet. Air-washed and free from all dirt and chaff. 30c per pkg.

Parrot Mixture. A mixture of food for all parrots; clean and wholesome. 40c per pkg.

Love Bird Mixture. A special mixture of seeds required for lovebirds and parakeets. 30c per pkg.

Bird Gravel. For all cagebirds. Carefully selected gravel of uniform grade. 15c per 2-lb. pkg.

Cod Liver Oil Nestling Food. For feeding young birds and for all canaries and other cage birds the year around, as a change. Stamina-building, bone-making. 15c and 30c per pkg.

Moultng Food. For the moultng season. A wonderful feather producer. 30c per pkg.

Song Food. Invigorating tonic food for canaries. Stimulates song. Can be used the year around with wonderful results. 25c per pkg.

Silvertone Pick-me-up. Famous old English food for canaries. A treat and tonic food of great value. 25c per pkg.

Bird Tonic. To be put in the bird's drinking water. A general tonic, for loss of song, colds, hard breathing, moultng period, etc. 15c and 30c per bottle.

Bird Lice Powder. A lice powder to be dusted into the bird's feathers. In bellows. 30c each.

FISH FOODS

Aquarium Fish Food. For Goldfish. A perfect substitute for insect life, etc. Will not foul the water. In sprinkler-top packages. 10c and 35c.

Tropical Fish Food. For all tropical fish. 15c per tin.

Wafer Fish Food. For those who prefer a food in wafer form. 10c.

Zeke Turtle Food (Dried Flies). The ideal food for turtles, etc. 15c.

Recto. Remedy for fungus in aquarium fish, also for tail rot, white spots, etc. A water purifier and rectifier. 25c per tin.

DOG MEDICINES

Dog Worm Capsules. A vegetable preparation for ridding dogs of large round worms (ascariads). Safe and harmless, but highly effective. 10c-60c.

Puppy Worm Capsules. For puppies and toy dogs. 10c and 60c.

Tonic. A general tonic for all dogs; to build up the system. 10c and 60c.

Constipation Tablets. Will relieve constipation in dogs and puppies. 10c and 60c.

Mange Liquid. For treating certain forms of mange and eczema. 75c per tin.

Sulfur Tablets. For cooling the blood; skin disorders, scratching and itching. 60c.

Special Tablets. For distemper in dogs, puppies and cats; fever reducer, diuretic and stimulant. \$1.00 per pkg.

Spratt's Cough Tablets (for coughs due to colds). An easy and effective method of treating this condition. Per package 60c.

Spratt's Diuretic Tablets. Recommended for treatment of kidney and bladder disorders. A soothing preparation which aids in the secretion and discharge of urine. Per package 60c.

Spratt's Dog Trot. It aids in keeping dogs away from females when in season. Safe and pleasant to use. Per package \$1.00.

Spratt's Ear Canker Ointment. An effective and highly recommended remedy for treating ear canker. Per package 75c.

Spratt's Calcium Phosphate (Tribasic). A splendid bone builder. An admirable adjunct in the feeding of puppies particularly those of the larger breeds. It may also be given to bitches before whelping. It is easily assimilated and has no irritating effects upon the stomach. 8-oz. package 50c.

Spratt's Cod Liver Oil Capsules. An easy and effective method of giving Cod Liver Oil to dogs. For the purpose of overcoming Vitamins A and D deficiencies resulting perhaps from lack of sunshine. Also intended for treating rickets. Per package 60c.

BOOKS AND LITERATURE

Spratt's Dog Book (Free). Forty-eight pages of "doggy" information. Complete, accurate and up-to-date. Write for your copy—it's FREE.

Canaries. Their Varieties and Management. A complete treatise on canaries, their breeds, care, breeding, etc. Price 10c.

Cat Culture. The care, feeding, breeding, etc., of cats. The different breeds, ailments and their treatments, etc. Price 35c.

Gladiolus

Algonquin. Brilliant glowing scarlet, 8-10 wide, open ruffled needlepoint blooms on a tall straight spike.

Beacon. (Palmer). Clear bright rose-scarlet with a large cream blotch; medium large, slightly ruffled, 8 to 10 open on a very tall straight spike.

Barcarole. (Palmer). Large clear grenadine orange with no markings. Beautifully ruffled blooms of heavy substance. One of the best new orange varieties.

Bit o' Heaven. Beautiful shade of orange with a yellow throat. Opens 9-12 medium sized blooms on a tall, straight plant.

Black Opal. Probably the darkest of all gladiolus, the color being a deep black red. The finest of the dark shades.

Blue Beauty. (Pf.) Light blue, shading darker toward the edges, giving the appearance of medium blue. Large wide open round flowers.

Candy Heart (Salbach). Clear flesh pink with large blotch of light carmine; 5 to 6 open blooms at one time.

Charles Dickens. (Pf.) A beautiful purple violet. Long spikes with 10 to 12 florets open at one time. Extra strong propagator.

Commander Koehl. (Pf.) Large dark scarlet red, without marking or blotches. Individual florets $6\frac{1}{2}$ inches across, of which there are six or seven open at a time.

Dr. F. E. Bennett. (D.) The popular, well known fiery red. One of the most brilliant scarlets grown. Fine large flower.

Golden Chimes. Long straight spikes bear large flowers of a beautiful yellow. Perfect form.

Greta Garbo. Creamy rose shades to light pink. Perfect florets, well placed on straight spikes. Wonderful show variety.

J. S. Bach. (Pf.) Salmon with white midrib. A wonderful exhibition variety with as many as eight florets open on tall spikes. One of the largest of the early blooming Gladiolus.

King Lear. Clear, deep reddish purple with silver line on edge of petals. 5-6 blooms open on a tall, strong, slender spike.

Maid of Orleans. (Pf.) Color creamy-white with a distinctive light cream shade in throat. The best white commercial.

Margaret Beaton. (Twomey.) One of the most beautiful blotched varieties. Tall, large and white with small scarlet feather. Opens about eight flowers. Good propagator.

Master Myron. A new huge bright red. Early.

Minuet. (Coleman). Wonderful clear lavender. A lavender by which all others are judged. Six or seven wide open florets open at a time. Arranged perfectly on straight spike.

Mother Machree. A beautiful combination of a wine-tinted lavender overlaid with salmon-pink.

Pelegrina. The large deep blue flowers have a strong appeal due to their color and fine arrangement of the florets.

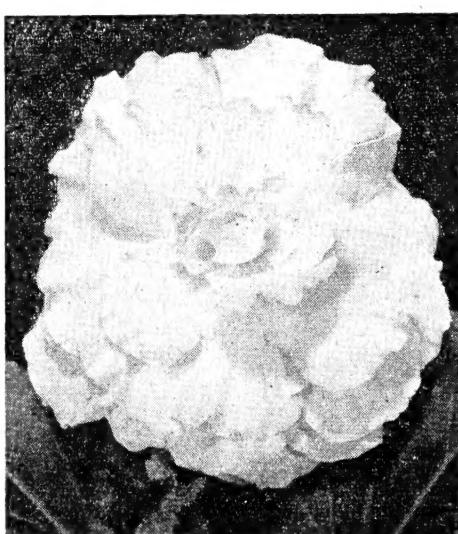
Picardy. (Palmer). Color soft apricot pink with a silvery sheen, feathering of slightly deeper color in the throat. The individual florets are extremely large, slightly ruffled and of a heavy waxlike substance.



Commander Koehl

OUR SUPREME MIXTURE

We offer a fine selection of unnamed varieties in different colors. These bulbs will produce an interesting display of Glads in your garden. **Dozen \$1.25; 100 \$9.00, not postpaid.**



Double Begonia

Red Phipps. (Briggs-Long.) Brilliant light scarlet. Splendid cut flower as color is excellent for indoor use. Also a good commercial variety.

Rosa Van Lima. Light rose with a few darker lines in the throat. Up to 8 or more well placed blooms on a tall strong spike prolific.

Shirley Temple. (Pruitt.) Creamy-white with a darker throat. Individual florets over 6 inches across, with 6 or 7 open. Splendid grower.

Snow Princess. An excellent white variety for exhibition and cut flowers. Tall, vigorous grower.

Takina. A recent Australian introduction. Violet-purple.

Vagabond Prince. (Palmer.) Iridescent garnet-brown, lighter in upper throat and small blotch of glowing scarlet-red on lip petals. 8 to 10 open on tall straight spike. Prolific.

Yellow Emperor. (Ellis.) Large flowered deep yellow. Vigorous grower. Best yellow in its class.

TUBEROUS BEGONIAS

These brilliant colored summer flowering bulbs of easy culture are ideal for shade. Along the coast of Oregon, Washington and California they are among the most popular flowers of today. Our bulbs are from selected strains.

Plant indoors in a warm place in February or March in moist sand or peat moss just covering the bulb. Pot up when well sprouted in a mixture of peat moss, humus or soil. Plant outdoors after danger of frost (early May in this section). They do best on the north side of a building or other location where they are shaded much of the day. To be successful prepare soil carefully and add liberal quantities of peat moss or well decayed leaves. Keep well watered and fertilized. Dig and store in late fall in a dry place during the winter. Warning — Failure is likely to result from planting dormant tubers in open ground, especially if it is cold and wet.

DOUBLE CAMELLIA TYPE

The largest and most popular types. Individual flowers from 4 to 8 inches in diameter, resemble Camellias and Roses, in all forms and variations in color.

Colors: White, yellow, cardinal red, pink, rose, blush, dark red, orange, apricot, flame orange.

Prices

Tubers—Delivery January-March.
Large size $1\frac{1}{2}$ -2 inches at 40c each;
\$4.00 per dozen.

SINGLE FRILLED TYPE (CRISPA)

Perhaps the most adorable of the single types—beautifully frilled and ruffled on the edge.

Colors: Orange, apricot, red, salmon, pink.

Tubers—Delivery January-March.
Large size $1\frac{1}{2}$ -2 inches at 40c each;
\$4.00 per dozen.

TIGRIDIA OR MEXICAN SHELL FLOWER

Bright, fantastically colored summer blooms lasting until frost. A most satisfactory summer bedder for fall sun.

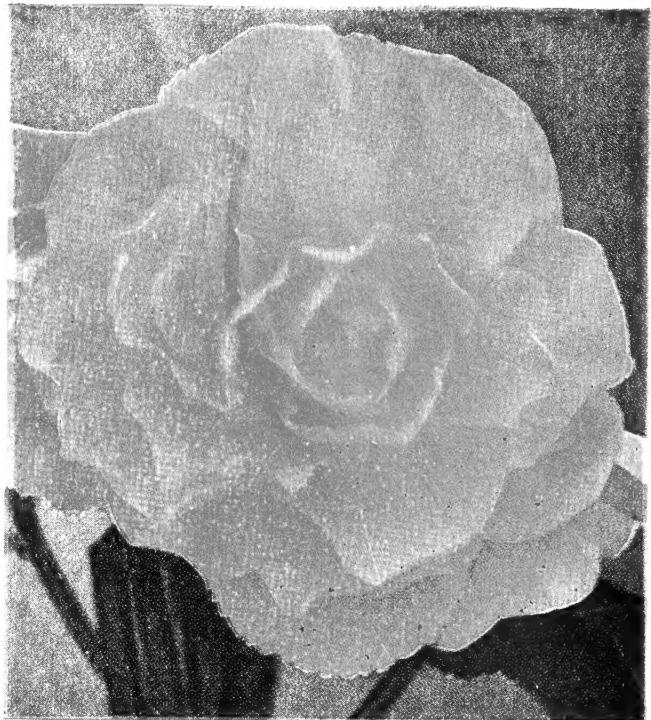
Give the same treatment as gladiolus, planting 4 inches deep and 6 inches apart from late February until May. Ordinary garden soil in full sun. Enjoys plenty of moisture. **Mixed Colors.**
15c each; \$1.50 per dozen.



GLADIOLUS

MARGARET BEATON

One of the most beautiful blotched varieties. Tall, large and white with small scarlet feather. Opens about eight flowers. Good propagator.



TUBEROUS ROOTED BEGONIA

CAMELLIA-FLOWERED

The largest and most popular types. Individual flowers from 4 to 8 inches in diameter, resemble Camellias and Roses, in all forms and variations in color.

Colors: White, yellow, cardinal red, pink, rose, blush, dark red, orange, apricot, flame orange.

Large size 1½-2 inches at 40c each; \$4.00 per dozen.



DAHLIAS (From Seed) (rp)

IMPROVED UNWIN'S DWARF HYBRIDS

These double and semi-double Dahlias are one of England's best contributions to the flower world. They grow from 18 inches to 2 feet tall and come in many delightful shades. Plants are compact and are as easy to grow as Zinnias. Bloom the whole summer.

Mixed Colors. Pkt. 25c.



GIANT SPENCER
WAVED SWEET PEAS

ZENNER BROS. SEED CO., Inc.
3718-20 N. E. Sandy Boulevard
PORTLAND 13, OREGON

MUrdoch 1101